Usenet Newsgroup Archive: rec.radio.amateur.antenna

2000-08 - 2000-09

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Date span: 2000-08-14 through 2000-09-30

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 3,981

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Instructions for MFJ 940 Tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: ed <ewindes@my-deja.com>
Message-ID: <8n9l6g$h21$1@nnrp1.deja.com>
Source record: 182669

Anyone able to give me a quick summary of how to adjust this tuner?

I understand the Transmitter/Inductance/Antenna adjustment - and how
adjust during recieve for maximum signal.

I don't understand how to adjust the "Power" knob (which pulls out in
addition to rotating) and how to read SWR/Power off the meter.

Thanks...

Sent via Deja.com http://www.deja.com/
Before you buy.

2. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39985602.7C1FBE9@usa.alcatel.com>
Source record: 182670

I think it'd be easier to use a coiled line. Comes to that, that's what the commercial folks do. But I KNOW a quarter wave stub worked for my 2 meter, 3/4 wave mobile antenna back in 1970.

In a real antenna there's non-zero current at the connected point. This may well be enough to excite a tank circuit. End effect is increased by the tank's parasitics. Even if this is not enough, you need only shorten the dipole a little to put the zero current point inside the tank circuit resonator. Think of it as shunt feeding the tank.

Cortland
(ka5s@saber.net).

Tom W8JI wrote:

> On Mon, 14 Aug 2000 11:08:45 -0700, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >180 degree phase shift must be added between the dipole sections. Either a stub
> >or a tank will do that. Once this is done, current flows (for example) TOWARDS
> >the right-hand end of the left side dipole and AWAY from the left end of the right
> >side dipole -- which is the same physical direction in both. This is what we
> >wanted.
> >
> >Cortland
> >(ka5s@saber.net)
>
> A tank certainly won't do it, because at resonance it appears as a
> high value resistance. The electrical equiv of a resonant parallel
> tuned circuit is a high value resistor. Above and below resonance, it
> looks like a simple capacitor or inductor in parrale with a high value
> resistor, or in series with a low value resistor.
>
> If you ceneter tap the tank, and ground reference that point, you can
> get push-pull voltages that will drive the next section.
>
> Stubs work after a fashon, if configured correctly.
>
> 73 Tom

3. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <pCYI5.14833$H14.34748@newsfeed.slurp.net>
Source record: 182671
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Hi, Doc:

Bet I could make my Air cooled Directional Resistor out of PTC or NTC resistors and play hob with its efficiency at varying input powers <G>

73, Dave, K3BHJ

4. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: RanHefner <ranhefnerNOraSPAM@yahoo.com.invalid>
Message-ID: <05248b8d.4c4df1dc@usw-ex0102-014.remarq.com>
Source record: 182672

FRAC is going to be in court so much, they will call him the
Court Jesture.

'Doc <w5lz@oio.net> wrote:
>
>
>Fractenna,
> I thought about making one. Does that mean your thinking
>about taking me to court?
> 'Doc (non Ph.D.)
>
>

Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

5. trade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20000814170249.29138.00000443@ng-fu1.aol.com>
Source record: 182673

Trade Alinco DJF1T 2m Hand held and/or MJF 1278B tnc for an hf/vhf/uhf mobile antenna(s) or other items. Please email to redberd95@aol.com.

Any offers considered.

Randy

6. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8n9qi5$l8k$1@nnrp1.deja.com>
Source record: 182674

In article <39985602.7C1FBE9@usa.alcatel.com>,
Cortland Richmond <Cortland.Richmond@usa.alcatel.com> wrote:
> I think it'd be easier to use a coiled line. Comes to that, that's
what the commercial
> folks do. But I KNOW a quarter wave stub worked for my 2 meter, 3/4
wave mobile antenna
> back in 1970.

OK...the discussions I've seen here (and been a part of) have offered various explanations about what's going on, or what people think is going on. (Or what people know MUST be going on! :-) How about some _measurements_? HOW do you know that the quarter wave stub worked? HOW does W8JI know that a coil with a perpendiular quarter wave wire attached to its center tap works, but that the same antenna minus the quarter wave wire does not give the desired collinear results? Are there simple measurements that are within the reach of many hams that will give the answers? What measurements, ideally simple ones, would suffice to convince you that proper collinear operation was (or was not) achieved? (I think the answer is yes, there are some reasonable measurements, but would like to see what others think would be reasonable tests to actually do.)

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

7. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: JimMil <k4sqrNOk4SPAM@juno.com.invalid>
Message-ID: <0547c49a.5d629d1f@usw-ex0102-014.remarq.com>
Source record: 182675

Al;

This was known as the MIN-QUAD in PA many years ago, and
recently resumed mfg. in Canada. When it rained in the Panama
Canal Zone, those spokes got wet, then detuned down the band Hi !
For those with CCR's, it is a usable beam tyope antenna, as is
the HF-5B by Butternut.
Enjoy it.

73
Jim

"Al" <noone@hotmail.com> wrote:
>Hello, anyone out there in cyberspace ever heard or used one
these, I got
>one for a good price. It's a small 2 el 6-20m beam that can be
used with a
>tv rotator. It uses spokes to tune it, yes I know...but it
really does have

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

8. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39986C85.9A48C3BA@west.raytheon.com>
Source record: 182676

Cortland Richmond wrote:
>
[stuff deleted]

> Consider a two element collinear. Where there is a potential, as at the end of a
> dipole, current will flow in every case towards or away from that point
> identically in any wires connected to it (but less than a half wave away). In a
> long wire this produces current 180 degrees out of phase between adjacent half
> wave sections, which is less than efficient for directivity. Therefore, another
> 180 degree phase shift must be added between the dipole sections.

> Either a stub or a tank will do that.

A stub is capable of doing the job but a tank is not, unless the components are so large physically as to have considerable capacitance to the environment.

> Once this is done, current flows (for example) TOWARDS
> the right-hand end of the left side dipole and AWAY from the left end of the right
> side dipole -- which is the same physical direction in both. This is what we
> wanted.

This does get confusing. Rather than presupposing what does and doesn't work for the phase inverter, let's take a look at what relationships are needed for the desired voltage and current relationships to exist. A complex structure containing several half waves of wire in addition to lumped resonant circuits is likely to support several modes, some of which are desirable and some of which are undesirable and may need to be explicitly suppressed.

Consider the same two element collinear antenna system as above except one element is above the other. The thread opened with a question specifically regarding vertical collinears so I think it makes sense to stay on track. The differences are immaterial as far as this discussion goes.

Assume the two elements have approximately equal radiating currents and are phased for optimum broadside gain. Arbitrarily choose a phase reference so that the voltage at the top of the lower element is positive compared to the bottom.

Further assume the current and voltage distribution is dominated by the familiar standing wave pattern characteristic of 1/2 wl dipole antennas. This is a reasonable and useful assumption and can be justified later if anyone cares.

The voltage polarity of the upper antenna will be such that the voltage at the highest part will be positive compared to the voltage at the lower end. In other words, the voltage phase will be the same for the both radiators.

As a simplifying assumption, assume that if the voltage (potential) distribution is the same on both elements, the current distribution will also be identical. Identical current distributions, or at least identical phase at the current loop, is the condition for maximum broadside gain.

The final assumption (for now) is that comparable power will need to be delivered to each element by the feed system.

If the voltage and current are known, power can be calculated: P = E * I where E and I are the voltage and currents expressed as phasors. For the present purpose we can assume the phases are either 0 (+) or 180 degrees (-).

Consider a three terminal 'black box' device connected to the top of the lower radiator, the bottom of the upper radiator, and to an imaginary virtual ground.

What direction must the current flow from the lower element into the block box in order for power to flow out of the lower element and into the black box?

What direction must the current flow into (-outof) the black box from the upper element in order for power to flow out of the black box into the upper element?

According to Kirchoff's current law, the current flowing from the virtual ground will be the algebraic sum of the other two currents. Assuming the other two currents are of the same magnitude, will they add or cancel? If the two currents cancel, then the virtual ground may be disconnected and the 'black box' device becomes two terminal. If the currents add, then the third terminal is _required_ for proper operation and something different from a two terminal LC tank will be required for the phase inverter.

bart
wb6hqk

>

9. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399869DC.401981C0@oio.net>
Source record: 182677
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

"David J. Windisch" wrote:
>
> Hi, Doc:
>
> Bet I could make my Air cooled Directional Resistor out of PTC or NTC
> resistors and play hob with its efficiency at varying input powers <G>
>
> 73, Dave, K3BHJ

But why would you want to decrease it's efficiency?
'Doc

10. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39986C49.5653014A@oio.net>
Source record: 182678
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband,
Actually, the input impedance of a 1/2 wave dipole that is
put up in a 'flat top' configuration is around 70-78 ohms. If
you fed this with 50 ohm coax, the SWR would be about 1.5:1.
The easiest way to match impedances is to let the legs of the
dipole 'droop' a little bit. The legs being slightly closer
together, and nearer to ground than the feed point, lowers the
input impedance. Most people call this an inverted 'V', but
it really isn't.
'Doc

11. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39986d4e.69253632@news.akorn.net>
Source record: 182679
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

On Mon, 14 Aug 2000 14:15:19 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>Tom W8JI,
> Just wondering;
> 1.Which cheek are you using?
> 2.Does your tongue get tired?
> 3.Does the date of the pennies make a difference?
> 4.Should you use ordinary table salt, or 'sea' salt?
> 5.Do you have to clean the jug like an aquarium?
> 6.Would a pan under the jug (like the one under a leaking grid
> resistor) help?
> 7.I have some 6" drill stem pipe, can I run higher power with it?
> 8.(see #7) should I cap the ends to contain stray RF?
> 9.Did you take corrolis(sp) effect into concideration?
> 10.If you mount the antenna on a 'lazy-susan' do you get circular
>polarization?

You may think I'm kidding, but the CBer down the road (11 miles
fortunately) has just such a ground system.

He also has the aluminum pie plates on his feedline (for lightning
protection) , and a chrome plated loading coil on his Chevy Suburban.

Please don't disapoint me, and tell me everything I've learned from
his is wrong! He is even installing a "Smoking Joe Gun" fractal shaped
addition to his CB antenna because it talks something he calls
"fatside" when he is mobile.

I haven't figured out what fatside is, but it probably has something
to do with his "back door", which he says makes him ten ate now that
it is plugged up.

It all starts with a tiny little radio, and ends up with a 4CX10000.
He put toilet floats on his element tips to prevent "fire" he says.
All of this is grounded in a water jug filled with salt water, sitting
on his basement floor.

12. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399871BB.DA19C8B9@cac.net>
Source record: 182680
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

'Doc wrote:

> sideband,
> Actually, the input impedance of a 1/2 wave dipole that is
> put up in a 'flat top' configuration is around 70-78 ohms. If
> you fed this with 50 ohm coax, the SWR would be about 1.5:1.
> The easiest way to match impedances is to let the legs of the
> dipole 'droop' a little bit. The legs being slightly closer
> together, and nearer to ground than the feed point, lowers the
> input impedance. Most people call this an inverted 'V', but
> it really isn't.
> 'Doc

I was going for the vertical dipole idea, as opposed to the horizontal.
I'm going for an omnidirectional antenna, here, and going horizontal
would make me directional perpendicular to the line of the antenna.
Considering most of the "skip" here comes from the south, and the only
available wall I could put a horizontal dipole on would face east, that
would be a bad thing.

-SSB

13. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39987053.70027282@news.akorn.net>
Source record: 182681

On Mon, 14 Aug 2000 13:26:42 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>I think it'd be easier to use a coiled line. Comes to that, that's what the commercial
>folks do. But I KNOW a quarter wave stub worked for my 2 meter, 3/4 wave mobile antenna
>back in 1970.
>
>In a real antenna there's non-zero current at the connected point. This may well be
>enough to excite a tank circuit. End effect is increased by the tank's parasitics. Even
>if this is not enough, you need only shorten the dipole a little to put the zero
>current point inside the tank circuit resonator. Think of it as shunt feeding the tank.
>
>Cortland
>(ka5s@saber.net).

It isn't having current that is the problem with the tak, it's what
the tank looks like as a two terminal network. It looks nothing at all
like a stub, which because of it's physical area can look like three
terminals!

You need three terminals to invert phase in a small physical area. You
can shift phase 90 degrees or less (like a high value of series
reactance driving a low resistance load), but you can't invert it
without some sort of third connection.

Think about that for a while, and I think you'll see my point.

There is absolutely no way a resonant circuit can work. All it would
be is a pure series resistance, or series reactance with a series or
parallel resistance.

73 Tom

14. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399871b5.70380962@news.akorn.net>
Source record: 182682

On Mon, 14 Aug 2000 14:36:10 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>Fractenna,
> I thought about making one. Does that mean your thinking
>about taking me to court?
> 'Doc (non Ph.D.)

Be careful Doc, if you show any interest in him he might court you.

73 Tom

15. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399873DD.9768FDCA@cac.net>
Source record: 182683
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband wrote:

> Got a few questions for the antenna gurus.
>
> I'm thinking about building a wire type dipole in the apartment, which
> should have its center resonance somewhere close to 27.385, but I have a
> few questions first, before I invest any time in it.
>
> 1. Is it illegal for a CB'er (I'm not a HAM...yet) to build his own
> antenna?
> 2. Suppose I want the dipole to be able to handle up to 200 watts (I'm
> giving myself some serious room here, overbuilding if you will)? What
> guage wire should I use to make the transmitting and "ground" elements?
> 3. What wavelength should I try to build the antenna? I've got about 30
> feet total to play with here. 1/4 wave each side would equate to roughly
> 18 feet. 3/8 each side would come out to around 27 feet. What wavelength
> would resonate the best, and have the best "ears" for my application?
> 4. If I build it, for example, 1/4 wave each side, is that a 1/2 wave
> dipole, or a 1/4 wave dipole? Technically speaking, that is. I don't
> want to tell people I've got the wrong thing.
>
> What I'm planning on doing is setting a pully at the corner of the eaves
> on one corner of the building, and holding the antenna up there with
> fishingline from the top, and pulling it tight from the bottom the same
> way. This way I'll be able to put the antenna up and take it down easily
> to tune it, etc. I was going to run the coax out to a powerstrip (the
> type with the screws in it to mount power cables with crimp ends n
> them), support it with another length of fishing line, and center it on
> the edge of the building. Then run the radiating element and the ground
> element off the respective screw lugs , supporting them top and bottom
> with other lengths of fishing line. The antenna will be roughly four
> feet from the corner of the building.
>
> Is this setup feasable? Or would I be wasting my time?
>
> Thanks in advance.
>
> -SSB

Hrm... I seem to have generated a thread that has gotten quite alot of
attention in the less than 24 hours of its life... Sorry to all of those who
got their mailboxes flooded on this one.

Thanks to those who really helped.

-SSB

16. Re: Full Moon on the 15th

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39987248.70528211@news.akorn.net>
Source record: 182684

On Mon, 14 Aug 2000 13:11:42 -0700, mensaboy
<garboy21NOgaSPAM@yahoo.com.invalid> wrote:

>
> Oh, is that why you're growing hair on your palms.. and I
>thought it was because....

Was that you at the airport, peeking over at my hands while I used the
public john? I wondered why all the interest, but a search of your
name on dejanews answers that.

17. Re: Open Letter To Fractena

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39987576.F546F433@cac.net>
Source record: 182685

sideband@mindspring.com wrote:

> Bill Turner wrote:
>
> > Doc, please spell Fractenna correctly, otherwise my killfile will miss
> > it.
> >
> > Thanks,
> >
> > W7TI
>
> Try just using "frac" as the delete string. Depends on the software you
> are using, but I think that will work on almost any variation.

If he does that, he'd miss stuff about fractures, infractions, and
fractitious postings. ::duck::

-SSB

18. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <4v_l5.36$M%6.557@newsfeed.slurp.net>
Source record: 182686
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Hi, Doc:

You said that antenna efficiency does not vary with power applied.

I replied that the efficiency of an antenna built with PTC resistors would vary in the opposite direction, with power input, from an antenna built with NTC resistors.

'Why' was not my point -- which was simply that efficiency could be made to vary with power applied. That's all.

73, Dave, K3BHJ

19. Re: Instructions for MFJ 940 Tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3998774d.3176888@news.crosslink.net>
Source record: 182687

On Mon, 14 Aug 2000 20:35:28 GMT, ed <ewindes@my-deja.com> wrote:

>Anyone able to give me a quick summary of how to adjust this tuner?

Methinks thou hast upgefucked. There is no such model tuner in the MFJ arsenal, unless it is some hopelessly out of date model - not that the old ones don't work just as well as the new ones.

>I understand the Transmitter/Inductance/Antenna adjustment - and how
>adjust during recieve for maximum signal.
>
>I don't understand how to adjust the "Power" knob (which pulls out in
>addition to rotating) and how to read SWR/Power off the meter.

Any reference to Power or SWR is a reference to sending a signal OUT - in other words, TRANSMITTING. I have to wonder whether or not you are licensed for that, since licensed operators usually put their callsigns into their posts

If the knob that you refer to as the "Power" knob is what it used to be on some earlier tuners, it was the means of calibrating to full scale on a forward power setting so that when you measured the reflected power it would show up on the meter as SWR. This was before the advent of the twin needle meter, which made all those steps unnecessary.

73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for direct e-mail reply.
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

20. Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <rN_l5.2224$Cc2.104745@newsread1.prod.itd.earthlink.net>
Source record: 182688

I just downloaded Richards Eznec file and ran it on my computer. I had just started to build the K2, believing Chip's site and info presented there. On seeing the Eznec file, I will use the wire for something else. I am no expert but I can see that better and simpler designs are easily possible. I like to build and experiment with antennas and I am amazed at the amount of anecdotal evidence that is presented to hams by hams. I run mainly QRP and always try to get the most efficient design I can. I use Eznec and TLA to optimize my antenna designs and feed methods. It always amazes me at the number of hams who are running 100 watts out but loose much of that power in they're feedlines and matching networks. They are actually running QRP and just don't know it!! It seems to me, and this is only my opinion but Chip seems to be in this catagory of anecdotal evidence and half truths. I guess I will be the next one to be sued. But we in the ham community need to produce better information and stay away from the "it worked great for me " syndrome.
Larry Naumann N0SA

21. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39987AE3.B1CD28D7@usa.alcatel.com>
Source record: 182689

In the case of a 34 wavelength (1/2 over a 1/4 wave) collinear, if the stub doesn't work, you get a nasty null in the pattern. That's pretty noticeable on 2 meters. Still, it's hard to retroactively measure the thing. Heck, if my Time Machine works, likely anything else I build must, too, right? (g!)

However... there must be more than a few stub-phased collinears out there, and someone must have real-world recent measurements on 'em. maybe one of those someones will pipe up.

Cortland
(ka5s@saber.net)

tom_bruhns@agilent.com wrote:

> In article <39985602.7C1FBE9@usa.alcatel.com>,
> Cortland Richmond <Cortland.Richmond@usa.alcatel.com> wrote:
> > I think it'd be easier to use a coiled line. Comes to that, that's
> what the commercial
> > folks do. But I KNOW a quarter wave stub worked for my 2 meter, 3/4
> wave mobile antenna
> > back in 1970.
>
> OK...the discussions I've seen here (and been a part of) have offered
> various explanations about what's going on, or what people think is
> going on. (Or what people know MUST be going on! :-) How about some
> _measurements_? HOW do you know that the quarter wave stub worked? HOW
> does W8JI know that a coil with a perpendiular quarter wave wire
> attached to its center tap works, but that the same antenna minus the
> quarter wave wire does not give the desired collinear results? Are
> there simple measurements that are within the reach of many hams that
> will give the answers? What measurements, ideally simple ones, would
> suffice to convince you that proper collinear operation was (or was not)
> achieved? (I think the answer is yes, there are some reasonable
> measurements, but would like to see what others think would be
> reasonable tests to actually do.)
>
> --
> Tom Bruhns -- K7ITM
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

22. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39989963.C84502C8@qth.com>
Source record: 182690
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

WHat size attic do you have? check out .....www.antenna.it.....for the D2T and.....www.qth.com/k5mdm.......for same...This thing works great in an attic...otherwise, I think you better move!! 73 murray

Jim Hahn wrote:

> Please help! I live in an area in San Diego where we have extremely
> restrictive CC&R's. Am getting back into amateur radio after an absence
> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
> primarily interested in cw on 40 or 30 meters. I cannot place an
> antenna really higher than our fence outside our house which is about
> 8-10 in height. Will not be running greater than 90 watts which is the
> most that the DX-60 will put out. Suggestions for an antenna for this
> setup? I would love to just put up a dipole but will not be possible
> because of neighbors. Also would love to put up the RG-8 by Cushcraft
> but would have the same problem at 26'. Have looked at: MFJ loop
> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
> but have been told unless you have the bilal up high it would be a waste
> of time. Thanks for any input anyone can give me! Jim in San Diego

[One or more binary attachments are retained only in the source text.]

23. Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000814191316.08165.00000585@ng-cc1.aol.com>
Source record: 182691

>Subject: Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~
>From: RanHefner ranhefnerNOraSPAM@yahoo.com.invalid
>Date: Mon, Aug 14, 2000 1:09 PM
>Message-id: <08797c75.339c014e@usw-ex0102-014.remarq.com>
>
>Al, can you give us a source for the rods and bracket material
>used in your 146/440 J-Pole?

check a local hardware, building supply or surplus.

I have mine delivered out of Denver.
I have to buy 400 to 500 lb at a time.
The angle comes in 25 foot lengths.
the 3/8 rod is in 12 foot lengths.

That is how I can sell the antenna so cheap.

73 Al Lowe N0IMW

24. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39987D50.AB5F2357@usa.alcatel.com>
Source record: 182692

Well, Tom, if getting small kills it, then a sufficently coiled up stub should suffer the same ills, being a small resonant circuit as well. I think, however, that they've been enough used that SOMEONE would have discovered if they didn't work. I admit I haven't done a
lot of looking into the subject!

Hmm. (thinking out loud). In the collinear, there is another capacitance element, from the tank to the fed (exciting) dipole, and from the tank to the connected dipole. Would that be enough?

Cortland
(ka5s@saber/ent)

Tom W8JI wrote:

> On Mon, 14 Aug 2000 13:26:42 -0700, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >I think it'd be easier to use a coiled line. Comes to that, that's what the commercial
> >folks do. But I KNOW a quarter wave stub worked for my 2 meter, 3/4 wave mobile antenna
> >back in 1970.
> >
> >In a real antenna there's non-zero current at the connected point. This may well be
> >enough to excite a tank circuit. End effect is increased by the tank's parasitics. Even
> >if this is not enough, you need only shorten the dipole a little to put the zero
> >current point inside the tank circuit resonator. Think of it as shunt feeding the tank.
> >
> >Cortland
> >(ka5s@saber.net).
>
> It isn't having current that is the problem with the tak, it's what
> the tank looks like as a two terminal network. It looks nothing at all
> like a stub, which because of it's physical area can look like three
> terminals!
>
> You need three terminals to invert phase in a small physical area. You
> can shift phase 90 degrees or less (like a high value of series
> reactance driving a low resistance load), but you can't invert it
> without some sort of third connection.
>
> Think about that for a while, and I think you'll see my point.
>
> There is absolutely no way a resonant circuit can work. All it would
> be is a pure series resistance, or series reactance with a series or
> parallel resistance.

>
> 73 Tom

25. Best Satelitt antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: AM-SAT <ssss@yahoo.com>
Message-ID: <kc%l5.6650$541.1054042@juliett.dax.net>
Source record: 182693

Tips for the best Antennas for Satelitte ?? Need a good antenna for 70 + 2, Circular polaritet

Ho have best quality, etc. ???

txn for help

26. Re: Best Satelitt antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3998858E.44F497BA@hiwaay.net>
Source record: 182694

look in the NG list for "Arrow146", or send email to:

arrow146@aol.com (Arrow146)
He makes what is probably the best for the $$ for this purpose.
Bill

AM-SAT wrote:
>
> Tips for the best Antennas for Satelitte ?? Need a good antenna for 70 + 2,
> Circular polaritet
>
> Ho have best quality, etc. ???
>
> txn for help

27. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39988AE8.B5298B3C@hiwaay.net>
Source record: 182695

Richard- Chip has just posted (on the egroups list) a defense that
although the K2 has negative gain, it is about 2 dB better than a
shielded dummy load. I assume this means it is not worthless, after all.

I am reminded that Kurt N. Sterba claims to have worked a contest using
two grocery carts back-to-back, as a dipole.

Model that!

HI Bill-W4BSG

Richard Clark wrote:
>
>Hi Larry,
>
> There is no doubt the design may be improved, but at what cost?
>
> This is something I try to point out at my page
> http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
> wherein I caution the constructor not to use "improved ground."

> First, what about the design is appealing that you would want to keep
> it - and optimize it? What about the design is appealing that would
> remain so if optimized?
>
> 73's
> Richard Clark, KB7QHC

28. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: hillbilly <davesradioNOdaSPAM@alltel.net.invalid>
Message-ID: <0629fd50.4af1d3d8@usw-ex0104-032.remarq.com>
Source record: 182696
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

the fatside you are refering to is really the flatside....to us
its horz. just cb slang.

Dave, KG5XR
Daves Radio Electronics
http://www.geocities.com/TheTropics/Island/4371/index.html

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

29. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Al <noone@hotmail.com>
Message-ID: <no0m5.98$M%6.700@newsfeed.slurp.net>
Source record: 182697

Thanks...guys...I appreciate the respond and the web address...I guess he needs to submit to search engines. I got mine used, the coils have been coated with some type of sealant (clear) maybe rtv? I have a large loop (superloop 80) and it compares favorable to it at only 15 ft off ground. Are you using a balun? if so what kind...I guess the coating of the coils might have changed resonance..I plan to put it on a 74 ft tower as soon as I get tweaked up...good luck with yours and let me know how it progresses...73...Alan Wilson http://www.qsl.net/ke4nu
"Dennis Edey" <vk4sx@dingoblue.net.au> wrote in message news:39987fa8$0$773$7f31c96c@news01.syd.optusnet.com.au...
> Hello here is the web site for Tom Mackays TGM MQ2, iam in the process of
> testing and using the MQ2 model in VK, it is the first mini quad of it's
> type i have ever had a go at,
> and to be quite honest,i was very surprised on how great it worked,my
> reference antenna was a 4EL 6 Band Yagi a TET TE 46.by EMTRON
> a great antenna even though it has traps,the MQ2 at it's worst .was only 2
S
> points down on RX/TX, and it was sat only 1/3 of the hight,
> so i hold great expectations for the antenna once it is set on the tower
at
> 42ft/
> the idea of the exercise was to look for a small effecient antenna for
town
> blocks and villages,this fits the bill and is still competitive.
> rgds Dennis VK4SX
>
> http://www3.sympatico.ca/t.g.m./
>
>

30. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3998915B.892AB302@hiwaay.net>
Source record: 182698

-- Isophomoric- , indeed.

(I wish I'd said that!)

Bill-W4BSG

Richard Clark wrote:

> If one were to extend Charles's metaphor, then the exercise we find
> here in this topic is isophomoric (equally clumsy from any point of
> view).
>
> 73's
> Richard Clark, KB7QHC

31. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <qZyYOV93SclZDFuqR372j4G5BNBg@4ax.com>
Source record: 182699

On Mon, 14 Aug 2000 19:12:24 -0500, Bill Aycock <baycock@hiwaay.net> wrote:

>Richard- Chip has just posted (on the egroups list) a defense that
>although the K2 has negative gain, it is about 2 dB better than a
>shielded dummy load. I assume this means it is not worthless, after all.
>
>I am reminded that Kurt N. Sterba claims to have worked a contest using
>two grocery carts back-to-back, as a dipole.
>
>Model that!
>
>HI Bill-W4BSG
>

Hi Bill,

I don't challenge the claim of the k2 besting a dummy load, I'm sure that this is accurate. As you might note however, those two grocery carts may easily best the k2 and is probably faster on rotation too.

;-) Model a grocery cart? Show me a picture and I will pirate the wire list by tracing its silhouette from the screen. ;-)

73's
Richard Clark, KB7QHC

32. Re: High Sierra mobile antenna recomendation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: John Timmers <timmers@telus.net>
Message-ID: <3998A038.47D660D0@telus.net>
Source record: 182700

Denis Sharon wrote:
>
> Hello Everyone,
>
> I'm about to install an HF rig in our motorhome. This will be my firt mobile
> experience (since 1961 anyway when I put a Gonset Communicator II in my
> Dad's car). The High Sierra HS-1500 MKII looks like a very nice antenna.
> Does anyone have any experience with it or, alternatively, does anyone have
> any particularly heartfelt recomendations?

I don't know about the HS-1500 MkII (could be a typo on your part...)
but I have had the HS-1500 installed on a Toyota p/u for quite a few
years now, and wouldn't hesitate to recommend it. Just make sure you
get all the body parts of the vehicle connected together using wide
braided straps, and check these connections frequently, to make sure
corrosion hasn't affected them.

Sign me as a satisfied customer of High Sierra Antennas, happy to give
the recommendation.

--
Regards:
By the way, this message may or may not contain binary data
and/or binary data by-products http://www3.telus.net/timmers

33. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <3998AF6F.84E496F1@mindspring.com>
Source record: 182701

Yuri Blanarovich wrote:

> >This absurd nonsense and threatening behavior by the CTO of FAS aimed at
> >Richard, which is clearly meant only to publicize Fractal, Inc. is the worst
> >we have yet seen.
> >
>
> Better be carefull using FAS, in Hungarian it means what would be known as Dick
> or as Brazilian call PR1CK. This could open whole can of W0RMS.
> Hope it helps to avoid more "problems."

But in Wisconsin it loosely translates to, "Of course I'll have butter with that".

34. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3998B47C.6EFA6A65@wb6hqk.ampr.org>
Source record: 182702

Hi Cortland,

Cortland Richmond wrote:
>
> Well, Tom, if getting small kills it, then a sufficently coiled up stub should suffer the
> same ills, being a small resonant circuit as well.

That's correct. The trick is that the stub is perpendicular to the primary radiating elements and is resonant for the common mode. The combined effect of 1/4 wl resonance in both the differential and common mode is to make the stub appear as a 1:1 autotransformer with a grounded center tap. Coiling up the stub will spoil the 'virtual ground' provided by the common mode resonance and adversely effect the polarity of the current phasing on the upper element.

> I think, however, that they've been
> enough used that SOMEONE would have discovered if they didn't work. I admit I haven't done a
> lot of looking into the subject!

There's all sorts of stuff out there which fails to meet advertising claims. I suspect the success of the technique in UHF mobile antennas has far more to do with elevating the radiator above the clutter than actual collinear gain. The benefit of height can easily outweigh the partial null on the horizon resulting from improper phasing.

> Hmm. (thinking out loud). In the collinear, there is another capacitance element, from the
> tank to the fed (exciting) dipole, and from the tank to the connected dipole. Would that be
> enough?

No.

bart
wb6hqk

35. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3998BCEB.D536757E@oio.net>
Source record: 182703
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband wrote:

> I was going for the vertical dipole idea, as opposed to the horizontal.
> I'm going for an omnidirectional antenna, here, and going horizontal
> would make me directional perpendicular to the line of the antenna.
> Considering most of the "skip" here comes from the south, and the only
> available wall I could put a horizontal dipole on would face east, that
> would be a bad thing.
>
> -SSB

I wouldn't worry too much about a dipole being directional. Unless
it is higher than 1/2 wave length above ground, it has an
omni-directional
pattern. The pattern also depends on surrounding objects
(distortion).
'Doc

36. Cushcraft R8 Antenna For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bob Green <W3RZD@peoplepc.com>
Message-ID: <3998c763@flexnet239.uunt.net>
Source record: 182704
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment

CUSHCRAFT R8 Mutiband Vertical Antenna for sale in Colorado Springs, Colorado Area
Installed April 00. Works Great with Alinco DX-70TH!! Relocating QTH to an apartment UGH!!!!!!
Buyer will have to remove (mounted to side of garage) All paperwork included.
$150.00 OBO Bob Green N3DMI/0 719-232-7449

37. Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: RanHefner <ranhefnerNOraSPAM@yahoo.com.invalid>
Message-ID: <0d3fcc2d.90034adc@usw-ex0104-025.remarq.com>
Source record: 182769

Thanks Al.

arrow146@aol.com (Arrow146) wrote:
>
>>From: RanHefner ranhefnerNOraSPAM@yahoo.com.invalid
>>Date: Sun, Aug 13, 2000 3:33 PM
>>Message-id: <09ff20e2.a96fa79f@usw-ex0101-005.remarq.com>
>
>>Question? Could you leave out the middle element (440 section)
>>and have a working 2-meter only antenna? And...If you fed the
>>longer element with the center conductor would it perform
better
>>than feeding the matching stub with the center conductor?
>
>Yes, the center element 6 1/4 inches is the short element for
>the 440 J-pole. Removal will not effect the 2 meter J-Pole.
>
>Feeding the long element instead of the short one will make
>no difference. That is why I quit making the J146.
>
>The 19 1/4 inch element AND the first 19 1/4 inch of the
>long element are the matching stub. Leaving the top 38 1/4
>inches as the 1/2 wave antenna.
>
>73 Al Lowe N0IMW
>Arrow Antenna
>
>

Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

38. Re: Arizona Republic Obituary - Lewis McCoy

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3997FB3D.C3069574@mwci.net>
Source record: 182770
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Aaron, Jones wrote:

> A very nice quarter page obituary in the printed edition of the
> Arizona Republic, Saturday August 8:
> ---------------------
>
> Lewis G. McCoy, ham radio expert, friend to amateurs
>
> By John Stanley
> The Arizona Republic
> August 12, 2000
>
> W1ICP is SK.
>
> In the world of ham radio, "SK" means "silent key" - the operator has
> died and can no longer send code.
>
> Lewis George "Mac" McCoy, known throughout the world by his call
> letters - W1ICP - died July 31 of a brain tumor. The Mesa resident was
> 84.
>
> McCoy was devoted to amateur radio since he was first licensed in
> Chicago in 1946. He was an expert at antenna design and delighted in
> teaching amateurs how to rig their equipment without spending a
> bundle. For years, he wrote a popular column for QST, the magazine for
> ham radio operators, and was revered by novices for his ability to
> explain complex topics in terms a beginner could easily understand.
>
> The goodwill ambassador for amateur radio was well-known for
> developing the transmatch, a device to refine broadcast signals, and
> for his expertise on television interference, a problem that plagued
> the early years of broadcasting.
>
> McCoy was born and raised in Chicago. Big for his age, athletic and
> charismatic, McCoy worked summers as a lifeguard and earned pocket
> money as a croupier and card dealer at speakeasies around town.
>
> He graduated from Englewood High School in 1934 and accepted a
> swimming scholarship to Indiana University, where he studied
> electronics. Times were tough, and when his funds dried up after three
> years, he dropped out.
>
> During the summer of 1938, while working at Lake Michigan, McCoy met

> Martha Denissen, who was checking out the lifeguards with her friends.
>
> McCoy eloped with his underage fiancee in January 1939. They married
> secretly in Crown Point, Ind., across the state line, and lived apart
> until the following summer, when they finally told their parents.
>
> McCoy bounced from job to job during the next few years, working as a
> chef's assistant at Chicago's World Fair in 1939, then helping his
> sister Florence with her coffee wagon. During World War II, he worked
> in a steel mill outside Chicago.
>
> In 1946, the McCoys moved to Missouri to make a new life. They lived
> in a one-room cabin with no electricity or running water.
>
> When McCoy got wind of a job opportunity at the American Radio Relay
> League, the national association of ham radio enthusiasts, in 1949, he
> leapt at it. The family moved to West Hartford, Conn., and McCoy threw
> himself into the ARRL. For years he ran W1AW, a station that broadcast
> Morse code on a regular schedule so amateurs could practice their
> receiving skills. He became a widely traveled and immensely popular
> spokesman for the ARRL, penning innumerable columns for novices.
>
> He moved to Silver City, N.M., after his retirement in 1978, but his
> interest in radio never diminished. Recently he was testing a
> computerized radio system developed by Kachina Communications of
> Cottonwood, and planned to review it in QST.
>
> McCoy was an amiable man of many interests and when he got interested
> in something, he jumped in with both feet. He collected coins and
> stamps and enjoyed lapidary work. Fascinated by Western lore, he
> became something of an expert on Billy the Kid. He read science
> fiction and wrote two unpublished novels.
>
> After Martha died in 1998, McCoy moved to Mesa. He married Clara Gibbs
> in May 1999.
>
> McCoy is survived by his wife, Clara Gibbs McCoy, of Mesa; daughters
> Sharon Armann and her husband, Neil, of Phoenix and Marsha Ashurst and
> her husband, John, of Lakeside; granddaughter Leigh Case and her
> husband, Brian, of Mesa; grandson James DeBragga and his wife,
> Rosanne, of Redmond, Wash.; great-grandchildren Aaron, Shelby and
> Lauren Case of Mesa and great-grandson Alex DeBragga of Redmond.

What a very nice piece this is. And well deserved.

Bill W0IYH

39. Re: HELP: RF grounding advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3997fa1a.39757356@news.akorn.net>
Source record: 182771
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Mon, 14 Aug 2000 06:03:57 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Thanks for the information. I hadn't forgotten it, I just didn't realize
>that modern radios were so poorly shielded and so sensitive to common
>mode current. The finest, most sensitive test equipment you can buy,
>which is extremely immune to outside interference, doesn't require any
>ground except the safety ground. So the requirement of additional ground
>isn't due to computerization but to basically poor design. I'm not
>surprised, though. The market places much more value on bells and
>whistles than on robust design.
>
>Roy Lewallen, W7EL

I think Dwight might be referring to problems caused by the poor
bypassing and lead routing that is common today in radios.

One example is in the key jack. My IC-751A doesn't ground the keyjack
at the chassis, instead the ground lead and everything bypassed has to
follow a path all the way to the circuit board where the keyer chip
is.

Audio systems do the same, although in some radiaos they wisely have
the RF bypasses grounded through a less lengthy path.

Grounding the case of the radio can help eliminate common mode
excitation causing the accessories connected to the radio from feeding
RF into the non-grounded jacks, like audio and keying input lines.

Why the radios are grounded that way internally, instead of using the
chassis or cabinet entrance points as a common ground point, is beyond
me. It must be because it's easier to insulate a jack and a tiny PC
board on a jack than isolate the signal input on a complex circuit
board, or they've never bother to learn how to work with ground loops
properly.

It amazes me they even pull that nonsense with a dc control signal
that has a two or three volt threshold, like the keying line inputs.
On my test radios that are subjected to high RF fields, I rewired
everything and grounded all the shields and jacks at the inputs where
the leads first enter the radio.

73 Tom

40. Re: Arizona Republic Obituary - Lewis McCoy

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8n8ufh$61h$1@slb2.atl.mindspring.net>
Source record: 182772
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Amen.

God speed Lew.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
William E. Sabin <sabinw@mwci.net> wrote in message
news:3997FB3D.C3069574@mwci.net...
>
>
> Aaron, Jones wrote:
>
> > A very nice quarter page obituary in the printed edition of the
> > Arizona Republic, Saturday August 8:
> > _____________________
> >
> > Lewis G. McCoy, ham radio expert, friend to amateurs
> >
> > By John Stanley
> > The Arizona Republic
> > August 12, 2000
> >
> > W1ICP is SK.
> >
> > In the world of ham radio, "SK" means "silent key" - the operator has
> > died and can no longer send code.
> >
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> > letters - W1ICP - died July 31 of a brain tumor. The Mesa resident was
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> > Chicago in 1946. He was an expert at antenna design and delighted in
> > teaching amateurs how to rig their equipment without spending a
> > bundle. For years, he wrote a popular column for QST, the magazine for
> > ham radio operators, and was revered by novices for his ability to
> > explain complex topics in terms a beginner could easily understand.
> >
> > The goodwill ambassador for amateur radio was well-known for
> > developing the transmatch, a device to refine broadcast signals, and

> > for his expertise on television interference, a problem that plagued
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> > McCoy was born and raised in Chicago. Big for his age, athletic and
> > charismatic, McCoy worked summers as a lifeguard and earned pocket
> > money as a croupier and card dealer at speakeasies around town.
> >
> > He graduated from Englewood High School in 1934 and accepted a
> > swimming scholarship to Indiana University, where he studied
> > electronics. Times were tough, and when his funds dried up after three
> > years, he dropped out.
> >
> > During the summer of 1938, while working at Lake Michigan, McCoy met
> > Martha Denissen, who was checking out the lifeguards with her friends.
> >
> > McCoy eloped with his underage fiancee in January 1939. They married
> > secretly in Crown Point, Ind., across the state line, and lived apart
> > until the following summer, when they finally told their parents.
> >
> > McCoy bounced from job to job during the next few years, working as a
> > chef's assistant at Chicago's World Fair in 1939, then helping his
> > sister Florence with her coffee wagon. During World War II, he worked
> > in a steel mill outside Chicago.
> >
> > In 1946, the McCoys moved to Missouri to make a new life. They lived
> > in a one-room cabin with no electricity or running water.
> >
> > When McCoy got wind of a job opportunity at the American Radio Relay
> > League, the national association of ham radio enthusiasts, in 1949, he
> > leapt at it. The family moved to West Hartford, Conn., and McCoy threw
> > himself into the ARRL. For years he ran W1AW, a station that broadcast
> > Morse code on a regular schedule so amateurs could practice their
> > receiving skills. He became a widely traveled and immensely popular
> > spokesman for the ARRL, penning innumerable columns for novices.
> >
> > He moved to Silver City, N.M., after his retirement in 1978, but his
> > interest in radio never diminished. Recently he was testing a
> > computerized radio system developed by Kachina Communications of
> > Cottonwood, and planned to review it in QST.
> >
> > McCoy was an amiable man of many interests and when he got interested
> > in something, he jumped in with both feet. He collected coins and
> > stamps and enjoyed lapidary work. Fascinated by Western lore, he
> > became something of an expert on Billy the Kid. He read science
> > fiction and wrote two unpublished novels.
> >
> > After Martha died in 1998, McCoy moved to Mesa. He married Clara Gibbs
> > in May 1999.
> >
> > McCoy is survived by his wife, Clara Gibbs McCoy, of Mesa; daughters

> > Sharon Armann and her husband, Neil, of Phoenix and Marsha Ashurst and
> > her husband, John, of Lakeside; granddaughter Leigh Case and her
> > husband, Brian, of Mesa; grandson James DeBragga and his wife,
> > Rosanne, of Redmond, Wash.; great-grandchildren Aaron, Shelby and
> > Lauren Case of Mesa and great-grandson Alex DeBragga of Redmond.
>
> What a very nice piece this is. And well deserved.
>
> Bill W0IYH
>

41. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399802C1.9F5E71F0@eznec.com>
Source record: 182773

"Infringement occurs when someone makes, uses, or sells an item covered by the claims of an in-force patent without the patent owner's permission. If a court finds that infringement occurred, every patent infringer can be ordered by a court to stop all infringing activity. Any of the infringers who profited from the infringement may also be found liable for money damages. Only an infringer who had reason to know that a patent was being infringed can be held liable for treble damages as a willful infringer."

Patent Copyright & Trademark, by Attorney Stephen Elias (Nolo, 1999)

Roy Lewallen, W7EL

Fractenna wrote:
>
> >hi, I built a fractal antenna from reading the patent
> >files on ibm patent website.
> >I guess I will be in court someday.
> >
> >I will post my findings on my website as soon as
> >I am able to start it up.
> >
> >jumbo
> >
>
> You will if you try to sell it or be involved in any commercial aspect.
>
> Cordially,
>
> NC

42. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3997fca5.40408811@news.akorn.net>
Source record: 182774
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

On Mon, 14 Aug 2000 13:35:30 GMT, WB3KUM/9
<breedend@NO.excite.SPAM.com> wrote:

>2 gauge wire was probably a typo. He either ment 12 or 20 gauge. For power
>levels under 100W, either would be fine, or anything in between. Use
>copperweld wire, copper coated steel wire. The copper is a better
>conductor, easier to solder to and the steel will give strength. A very
>simple kit can be had from many sources, mail order, internet, a good
>electronics store, and even radio shack.

For a 200 watt CB transmitter, you HAVE to use 2 gauge wire. You also
need a better ground system. Silver or chrome plated wire is best.

A jug of saltwater (like an old water cooler jug) with the bottom
filled with old pennies and ground wires run through the cork works
well for a portable salt-water ground, and will give a huge signal
increase.

With conventional 5 watt CB's and 100 milliwatt to 500 watt or larger
amateur installations, the rules are different.

That's because the amateur equipment operates on another BAND that
doesn't restrict the flow of current and voltage as much as CB, and
can comfortably use almost any gauge or type of wire (alsthough copper
or siver plated copper is best). 5 watt CB transmitters will work
perfectly well following the same guidelines.

For amateur bands and low-power CB use, the salt water portable ground
would not be adequate. You need an outside ground or counterpoise
system of some form, used in conjuction with a safety ground.

Many people don't realize about the gyro-rotational effect of charges
in the 27 MHz band. Thats why diathermy and ISM devices are allowed on
27.120 MHz, and why when a CB runs more than five or ten watts none of
conventional antenna and grounding theory applies. I even share a
patent for a medical device operating on 27.120 MHz, and I'm the
engineer who developed a few dozen devices patented by medical
companies in that frequency range.

73 Tom

43. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39980169.41628531@news.akorn.net>
Source record: 182775

On 14 Aug 2000 13:11:59 GMT, fractenna@aol.com (Fractenna) wrote:

>To my knowledge, this is a new chapter in the history of the internet.
>
>NC

Yes indeed. The title of the chapter is how one person posting under
several signatures, single-handedly brought down an entire newsgroup.

Chip, do you ever go to hamfests? Are you going to Boxboro?

73 Tom

44. Full Moon on the 15th

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3998059d.42704758@news.akorn.net>
Source record: 182776

In case anyone wonders why the babbling insanity is getting worse,
check your lunar calanders.

I've heard you can't go near a psycho-ward on the full moon, and now I
see why. BTW, woven baskets are fractal shaped.

73 Tom

45. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399808A5.EBBA69DF@cac.net>
Source record: 182777
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Tom W8JI wrote:

> On Mon, 14 Aug 2000 13:35:30 GMT, WB3KUM/9
> <breedend@NO.excite.SPAM.com> wrote:
>
> >2 gauge wire was probably a typo. He either ment 12 or 20 gauge. For power
> >levels under 100W, either would be fine, or anything in between. Use
> >copperweld wire, copper coated steel wire. The copper is a better
> >conductor, easier to solder to and the steel will give strength. A very
> >simple kit can be had from many sources, mail order, internet, a good
> >electronics store, and even radio shack.
>
> For a 200 watt CB transmitter, you HAVE to use 2 gauge wire. You also
> need a better ground system. Silver or chrome plated wire is best.
>
> A jug of saltwater (like an old water cooler jug) with the bottom
> filled with old pennies and ground wires run through the cork works
> well for a portable salt-water ground, and will give a huge signal
> increase.
>
> With conventional 5 watt CB's and 100 milliwatt to 500 watt or larger
> amateur installations, the rules are different.
>
> That's because the amateur equipment operates on another BAND that
> doesn't restrict the flow of current and voltage as much as CB, and
> can comfortably use almost any gauge or type of wire (alsthough copper
> or siver plated copper is best). 5 watt CB transmitters will work
> perfectly well following the same guidelines.
>
> For amateur bands and low-power CB use, the salt water portable ground
> would not be adequate. You need an outside ground or counterpoise
> system of some form, used in conjuction with a safety ground.
>
> Many people don't realize about the gyro-rotational effect of charges
> in the 27 MHz band. Thats why diathermy and ISM devices are allowed on
> 27.120 MHz, and why when a CB runs more than five or ten watts none of
> conventional antenna and grounding theory applies. I even share a
> patent for a medical device operating on 27.120 MHz, and I'm the
> engineer who developed a few dozen devices patented by medical
> companies in that frequency range.
>
> 73 Tom

That's so far over my head it's either BS, or I need to go and hit the theory books a whole bunch harder than I have

Gyro Rotational charge effects? From the Kanooter flanges? ::grin::

-SSB

46. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000814105506.00525.00000034@ng-fz1.aol.com>
Source record: 182778

>
>Chip, do you ever go to hamfests? Are you going to Boxboro?
>
>73 Tom
>
>
>
>
>

Are you threatening him? Another "attempt" at his life?
Shame on you!
This is a public bla bla bla.....
See you in the food court!

47. NC Bloviates about the NG and its denizens

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <bKTl5.14323$H14.32608@newsfeed.slurp.net>
Source record: 182779

NC:

What *would* lead in some way for you to contribute to a new chapter in the history of this NG, by simply leaving it?

Would you consider entering democrat politics, where your desires to demonize the holders of opposing opinions, and your tiresome bloviations about vast conspiracies and victimhood, would probably find an eager audience?

Can we help you find your way out, pls?

Why would a person such as yourself want to subject himself to the milieu you describe?

Take your own excellent advice.

Stop reading the materials here.

Stop contributing to the NG here.

Go away to the dot-com you have created and stay there.

We here have enough intestinal and other fortitude to do without your contributions.

We do not wish you ill.

We wish nothing more than for you to get out, stay out, and don't come back.

Is there any part of 'get out, stay out, and don't come back' that you do not understand?

If so, ask your attorney to explain the phrase.

Take fill dirt, the Zero Knowledge Transferable character, with you.

K3BHJ
****

NC bloviated, in part, somewhere, about this NG:

Copyright violation; impersonation; libel;prevarication about proper copyright
and pending patent notification; misleading and incorrect assessment; and so on
will NOT lead in any way to my leaving this NG.

If you do not wish to read the materials, then don't.

What has resulted from this abuse is a new and global interest in exactly the
kind of mischief that has been promulgated here. I will actively assist any and
all scholars, legal types, and press who want to investigate this active
attempt to destroy a new technology and the inventor and company that go with
it.

To my knowledge, this is a new chapter in the history of the internet.

NC

48. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <lq09n8.3or.ln@mail.specsol.com>
Source record: 182780

Fractenna <fractenna@aol.com> babbled:
>>Thats too much- you dont have that much that is worth reading.
>>
>>Bill-W4BSG

> Copyright violation; impersonation; libel;prevarication about proper copyright
> and pending patent notification; misleading and incorrect assessment; and so on
> will NOT lead in any way to my leaving this NG.

> If you do not wish to read the materials, then don't.

> What has resulted from this abuse is a new and global interest in exactly the
> kind of mischief that has been promulgated here. I will actively assist any and
> all scholars, legal types, and press who want to investigate this active
> attempt to destroy a new technology and the inventor and company that go with
> it.

> To my knowledge, this is a new chapter in the history of the internet.

> NC

The biggest problem is you have NO knowledge of the internet.

Rather than "new and global interest", you are nothing more than yet another
self righteous ass. Your ilk has been seen MANY times before on the internet
and the Arpanet before it. No one particularly cared about the others and
no one particularly cares about you. You are like a little annoying bug
that keeps buzzing around one's head; nothing of substance and a minor
annoyance.

Get a clue; Al Gore didn't invent the internet and you are just another
whinner.

Jim Pennino

49. Re: Help Tuning ALL band dipole 80 and 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Randy Mclean <rmclean@no_address.com>
Message-ID: <D6004C1446D49C8E.8DBCAA02012637B5.240F3AD48AD8DAD2@lp.airnews.net>
Source record: 182781

See http://www.texastowers.com/vgeant.htm and look at the ALLBANDER :-) 73
k5drm

Ralph Mowery wrote:

> It is not a g5rv if it is 135 feet long. A g5rv is only around 105
> feet long. YOu have a 1/2 wave dipole antenna. Not sure what lind of
> feed line or system you are using but it should be some open wire type.
> That antenna is not really designed for 160 meters,but the tuner will
> probably get you a match there.
>
> David wrote:
> >
> > Hello I using the g5rv ALLBANDER antenna. Its an dipole that measures
> > 135'. I am also using the mfj-969 antenna tuner to tune it with. Well
> > the specs of the allbander antenna clams to support 160-10, but I am
> > unable to get it to tune vary well on 80m and not at all on 160m. I can
> > get the swr down to about 2.5 on 80 and 6 on 160. All the other bands
> > seem to work great. I just hooked it up for to testing and haven't
> > grounded the antenna tuner or the radio yet. I will ground both when I
> > am confident about my setup and setup a more permanent station. Could
> > this be the reason I can't tune 160m or 80m?? Any other hints on what I
> > might check to correct this. Thanks de k5drm/AE

--
Randy Mclean
Administrator of Novell, UNIX, NT, Network Security, and/or any thing else
that users break around here(WHY IS THAT???)!

50. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <a23gps8o10skd5vv2k3465kn9talkcvvt7@4ax.com>
Source record: 182782

Jim Hahn <jimboL51@home.com>
shared these priceless pearls of wisdom:

->Please help! I live in an area in San Diego where we have extremely
->restrictive CC&R's.

It isn't Tierrasanta, is it? I used to be the president of the homeowners' association there. {;-)

In addition, I had a dipole (inverted V, actually) run down the outside rafter of the house facing the backyard. Stapled that sucker to the wood up near the shingles, painted it exactly the same color as the rafters and nobody ever knew.

If you go to to 10869 Esmeraldas, you will probably find the thing still stapled to the rafters. I didn't bother tearing it off when I sold the place and moved.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

51. Re: Full Moon on the 15th

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jeremy <jzachau@worldnet.att.net>
Message-ID: <AcUl5.24932$gW5.1324663@bgtnsc04-news.ops.worldnet.att.net>
Source record: 182783

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3998059d.42704758@news.akorn.net...
> In case anyone wonders why the babbling insanity is getting worse,
> check your lunar calanders.
>
> I've heard you can't go near a psycho-ward on the full moon, and now I
> see why. BTW, woven baskets are fractal shaped.
>
> 73 Tom

Ha! - You can ask any cop too.

Atleast the EME guys are happy, right?

73 de It's just N0USE

52. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <8s19n8.vqr.ln@mail.specsol.com>
Source record: 182784

Fractenna <fractenna@aol.com> babbled:

> It is clear that your objective is clear to facilitate such destructiveness,
> without any legal or factual basis.

> NC

You are deluding yourself. Still.

Jim Pennino

53. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <t429n8.vqr.ln@mail.specsol.com>
Source record: 182785

Fractenna <fractenna@aol.com> mumbled:

> Tomorrow is another day; not necessarily the best in the history of ham radio.
> But some people need to be shocked into the reality: this is not a game; I am
> not a punching bag; and the issues far transcend me personally.

> Don't read the news while drinking your coffee.

> 73,
> Chip N1IR

Actually, I don't usually drink coffee while reading your posts. They are
usually so ludicrous I'd be in big trouble with hot coffee.

Jim Pennino

54. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <q539n8.vqr.ln@mail.specsol.com>
Source record: 182786

Fractenna <fractenna@aol.com> wrote:

> Because, Doc:

> 1) Facts are important. Putting up pirated material in order to motivate
> someone to leave a NG is , perhaps, one of the worst aspects of ham radio and
> the internet to date;

Yes, facts are important. We get few from you. Lots of threats of lawsuits and whinning about being a victim, but few facts.

I saw a review of an antenna that is supposedly your design; I saw no "pirated" material. You are deluding yourself again.

> 2) Targetting an individual to abuse is never acceptable;

Poor Chip, always a target and through no fault of his own. Try acting like a reasonable adult instead of a spoiled little child and maybe people will stop treating you like a spoile little child.

> 4) The objective accomplishes only negative things for the abusers, including
> yoiurself, involved.

Again, always the innocent victim, aren't you? The only one that seems to have an "objective" here is you and seems to be to get attention like a little child.

> For the record, in the last few days I have been accused of:

> 1) presenting fraudulent and misleading data;
> 2)improper use of my academic appointment;
> 3) sexual liason with someone I have not met and an interest in cicumcision;
> 4)improper reaction to a direct impersonation of me on this NG;
> 5) mental illness;
> 6) improper and misleading attribution of patent information;
> 7) fraudulent claim of invention.

Your victim mentality is misleading you again. I would tend to think that number 5 may be true, not because of what anyone else has posted, but because of your own posts.

> Again, I MUST remind all that this is a very public forum, not a local CB
> channel. Engineers, scientists, hobbyists, enthusiasts, the press, and many
> others read this material seeking information.

Why must you remind everyone of something that everyone, except apparently you, has known for years?

> Unfortunately, I think there IS a real story here, as they say, and the
> individuals involved are publicly, globally, and in perpetuity on record.

> Chip N1IR

Oh, stuff it. You are not impressing anyone.

Jim Pennino

55. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3997FDDC.16F4@pacbell.net>
Source record: 182787
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Tom W8JI wrote:
>
> On Mon, 14 Aug 2000 13:35:30 GMT, WB3KUM/9
> <breedend@NO.excite.SPAM.com> wrote:
>
> >2 gauge wire was probably a typo. He either ment 12 or 20 gauge. For power
> >levels under 100W, either would be fine, or anything in between. Use
> >copperweld wire, copper coated steel wire. The copper is a better
> >conductor, easier to solder to and the steel will give strength. A very
> >simple kit can be had from many sources, mail order, internet, a good
> >electronics store, and even radio shack.
>
> For a 200 watt CB transmitter, you HAVE to use 2 gauge wire. You also
> need a better ground system. Silver or chrome plated wire is best.
>
> A jug of saltwater (like an old water cooler jug) with the bottom
> filled with old pennies and ground wires run through the cork works
> well for a portable salt-water ground, and will give a huge signal
> increase.
>
> With conventional 5 watt CB's and 100 milliwatt to 500 watt or larger
> amateur installations, the rules are different.
>
> That's because the amateur equipment operates on another BAND that
> doesn't restrict the flow of current and voltage as much as CB, and
> can comfortably use almost any gauge or type of wire (alsthough copper
> or siver plated copper is best). 5 watt CB transmitters will work
> perfectly well following the same guidelines.
>
> For amateur bands and low-power CB use, the salt water portable ground
> would not be adequate. You need an outside ground or counterpoise
> system of some form, used in conjuction with a safety ground.
>
> Many people don't realize about the gyro-rotational effect of charges
> in the 27 MHz band. Thats why diathermy and ISM devices are allowed on
> 27.120 MHz, and why when a CB runs more than five or ten watts none of
> conventional antenna and grounding theory applies. I even share a
> patent for a medical device operating on 27.120 MHz, and I'm the
> engineer who developed a few dozen devices patented by medical
> companies in that frequency range.
>
> 73 Tom

You forgot to mention the aluminum pie plates on the coax for lightning protection, and the fractal reflectors to give the antenna a truly isotropic pattern. If you're going to have a 200 watt C.B. antenna you should go first class.

Tom Donaly KA6RUH

56. Re: Preferred Orientation of Guy-Wire Turnbuckles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Larry Anderson <w6lar@cybertime.net>
Message-ID: <39982015.98656452@cybertime.net>
Source record: 182788

Same even if you use Phillystrand.......Treat the turnbuckles the same...

Larry W6LAR

'Doc wrote:

> Roger Halstead wrote:
> >
> > --
> > Roger Halstead (K8RI) www.RogerHalstead.com
> > N833R World's Oldest Debonair? s# CD-2
> >
> > "SECOPSYS" <secopsys@aol.com> wrote in message
> > news:20000812224952.25849.00000105@ng-fk1.aol.com...
> > > read Doc's last sentence about safety wiring 3 times....it's the most
> > important
> >
> > Unless you use Radio Shack, or equivelant guy wire!
> >
> > Roger (K8RI)
> >
> > > part of this entire "thread"
> > > 73, Richard
> > >
>
> Roger,
> If your not using EHS guy wire, you should be. Radio Shcak doesn't
> sell EHS guy wire.
> 'Doc

57. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39981757.1055067@news.seanet.com>
Source record: 182789

On Sun, 13 Aug 2000 23:11:41 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>
>
>Richard Clark wrote:
>>
>> Hi Bill,
>>
>> You need no basis for comparison. My data equals or betters all characteristics already
>> specified, this in itself testifies that my model is a true and accurate replication
>> without being a duplication. It also testifies to the ability to clone a non-identical
>> fractal without suffering degradation of key characteristics (actually I improved
them;-).
>> 73's
>> Richard Clark, KB7QHC
>
>Richard- I think I was misunderstood- I have no need for comparison-
>your work satisfies me, and gives me the tools to play around with, for
>additional characteristics.
>
>I was refering to the possible need for Chip to have a comparison made-
>He is sure to claim that you did it wrong (?), despite the track record
>of your work. His work requires very careful reading- for instance- his
>comparison to a dipole is for one at the same height as the flyer- not
>the dipole normlly expected.
>
>your reference to "Brittle" could be applied to his personality, as
>well. (IMHO)
>
>Thanks for the interesting work- Bill

Hi Bill,

The riposte about comparison was not meant to be literal. As you've
pointed out there exists no publicly available evidence to the
contrary.

You may be surprised to not see the typical knee-jerk response,
because I carefully and dutifully insured that ALL results conformed
to published characteristics.

Well, I've got to admit I didn't do a perfect job, I improved the
design (and by only fumbling around too!). You will find no
contradiction of my results, the only reaction will be embarrassment
in that the design NEEDS loss to offer these wonderful

characteristics. That I improved the product necessarily proves that my replication is MORE lossy than the original, but if we are giving benediction to dogs, then mine must be the pope by now.

;-) One consequence of this improvement is that it happened without recourse to the standard methods employed by practitioners of the craft (or they would have done it themselves - in other words it was not "obvious" to them). As such, and given there is an improvement (a critical characteristic to the Patent Office), it is obvious that it is patentable by me within one year of last weekend. To all others, this becomes "prior art."

However, in the spirit and to the letter of my offer made here roughly a year ago, I cede all but commercial rights to this design to the public domain. All parties may build their own model as long as they do not do so as part of a commercial interchange (no sales or commercial exchange is allowed). I expect certain commercial interests to violate this will, but they do so in jeopardy of legal consequences. Sorry gang, couldn't keep the levity from creeping in ;-)

73's
Richard Clark, KB7QHC

58. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39991c85.2381524@news.seanet.com>
Source record: 182790

On Mon, 14 Aug 2000 00:55:48 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>
>I wonder when he will publish a sensitivity analysis of this antenna design
>to prove it's robustness compared to other designs of comparable capability?
>
> Peter K1PO

Hi Peter,

I've done that already at my page, but IF other publication comes, I
doubt I will be cited (prior art is often ignored).

73's
Richard Clark, KB7QHC

59. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39982187.F9DEA198@cac.net>
Source record: 182791
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Donaly wrote:

> Tom W8JI wrote:
> >
> > On Mon, 14 Aug 2000 13:35:30 GMT, WB3KUM/9
> > <breedend@NO.excite.SPAM.com> wrote:
> >
> > >2 gauge wire was probably a typo. He either ment 12 or 20 gauge. For power
> > >levels under 100W, either would be fine, or anything in between. Use
> > >copperweld wire, copper coated steel wire. The copper is a better
> > >conductor, easier to solder to and the steel will give strength. A very
> > >simple kit can be had from many sources, mail order, internet, a good
> > >electronics store, and even radio shack.
> >
> > For a 200 watt CB transmitter, you HAVE to use 2 gauge wire. You also
> > need a better ground system. Silver or chrome plated wire is best.
> >
> > A jug of saltwater (like an old water cooler jug) with the bottom
> > filled with old pennies and ground wires run through the cork works
> > well for a portable salt-water ground, and will give a huge signal
> > increase.
> >
> > With conventional 5 watt CB's and 100 milliwatt to 500 watt or larger
> > amateur installations, the rules are different.
> >
> > That's because the amateur equipment operates on another BAND that
> > doesn't restrict the flow of current and voltage as much as CB, and
> > can comfortably use almost any gauge or type of wire (alsthough copper
> > or siver plated copper is best). 5 watt CB transmitters will work
> > perfectly well following the same guidelines.
> >
> > For amateur bands and low-power CB use, the salt water portable ground
> > would not be adequate. You need an outside ground or counterpoise
> > system of some form, used in conjuction with a safety ground.
> >
> > Many people don't realize about the gyro-rotational effect of charges
> > in the 27 MHz band. Thats why diathermy and ISM devices are allowed on
> > 27.120 MHz, and why when a CB runs more than five or ten watts none of
> > conventional antenna and grounding theory applies. I even share a
> > patent for a medical device operating on 27.120 MHz, and I'm the
> > engineer who developed a few dozen devices patented by medical
> > companies in that frequency range.
> >

> > 73 Tom
>
> You forgot to mention the aluminum pie plates on the coax for lightning
> protection, and the fractal reflectors to give the antenna a truly
> isotropic pattern. If you're going to have a 200 watt C.B.
> antenna you should go first class.
>
> Tom Donaly KA6RUH

Ok...

Now this is getting a bit silly...

Originally I asked a few questions about constructing an antenna.. Great. I got a couple responses that seemed to answer those questions. Again, Great.

Now people are posting simply to cloud the issue, and its not appreciated.

For those of you who tried to help, I send my thanks..

For the rest of you, who purposely tried to cloud the issue, I hope you enjoyed making fun of the CB'er. I had thought the original reason for HAM radio was to share knowledge through communication.. I guess I was wrong.

-SSB

60. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399a1f28.3056084@news.seanet.com>
Source record: 182792

On Mon, 14 Aug 2000 02:52:08 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Doc:
>
>I wonder if FAS CTO dares to publish a comparables sensitivity analysis to
>quantify the robustness of his new antenna design?
>
>Hope this helps someone...
>
> Peter K1PO

Hi Peter,

Already answered the substance of this elsewhere so I will only
comment on your boundless optimism without dampening your spirits with
the frustration of reality (oops! sorry I let that slip).

73's
Richard Clark, KB7QHC

61. Re: HELP! No stealth antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <8n9923$6n6$1@nnrp1.deja.com>
Source record: 182793
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

In article <8n7kcsvm1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> I live on the ground floor. Outside my apartment lies a 10-20 foot
> stretch of grassy open space where anyone can walk by (well, at least
> it faces away from the parking lot and towards an unreachable area of
> steeply downsloping woods). Between my apartment and the unreachable
> area, there are NO bushes, shrubs, railings, trees, or other large
> objects I can use to conceal wires or other objects. I'm sure that
> even a well-camouflaged wire would be discovered sooner or later. At
> least someone on a higher floor can better conceal things.
>
> Can I still operate HF stealth with an outdoor antenna? Could a wire
> antenna work?
>
> Or would I be better off using a mobile antenna (like a Bugcatcher)
> outside and bringing it inside when I am not operating? Since I only
> plan to operate a few hours per week, few people would notice.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu AT apexmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>
Move out.....seriously tho....you got a problem there. And yes a wire
antenna would work out well. The trick will be to hide it. I don't
know what you mean by "unreachable area".

Also can you run a whip on your car and drop a feedline to it? Just a
thought.

With what your saying I guess you will have to stick something out the
window in the middle of the night.

Is there anyway you could get access to the roof?

Dan/W4NTI

--
"Just tellin the truth, and they cain't stand it."

Sent via Deja.com http://www.deja.com/
Before you buy.

62. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39982181.F2B7F8D9@hiwaay.net>
Source record: 182794

Richard Clark wrote:
>
> You may be surprised to not see the typical knee-jerk response,
> because I carefully and dutifully insured that ALL results conformed
> to published characteristics.
>
> 73's
> Richard Clark, KB7QHC

Richard- forgive me, but the Knee-jerk from the jerk has already happened. One of the few mistakes you have made is in applying logic to an expected reaction from the Chipper. He is above and beyond logic, because he is a law unto himself. Fortunately, being a law unto oneself only has legal standing in competency hearings.

I agree with all you say, and will be glad to stand up for the "prior art" and "improvement" and the "not obvious" parts of the situation.

Bill- W4BSG

63. Re: Flyer EZNEC availability

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39982269.44F0506B@hiwaay.net>
Source record: 182795

Sorry to add to my own post- but- Has ANYONE recieved the EZNEC file
Chip promised?, I'm not asking you for it, just want to see if it exists
and has been given to anyone.

Bill-W4BSG

Bill Aycock wrote:
>
> Subtitle- "He lied"
>
> On tuesday, 8Aug2k, at 12:48z- Chip Announced on this NG that the EZNEC
> file for the new fractal flyer was available, but only from the egroups
> list, "fractalantenna". I had gone off-list from this list in April (I
> think) because of lack of traffic. I rejoined the list, the next
> morning.
>
> When I went to the archives, I found the same announcement, from Chip,
> giving the conditions under which I could get the file. Since I did not
> intend to pass it on, or to make commercial use of it, I sent a post to
> Chip, as "Owner-Fractalantenna", requesting the file, and giving him the
> assurances he had asked for. This was at 20:50z, on 9Aug2k.
>
> At 21:09z, on 9Aug2k, Chip sent me a note saying- Sure, and again asked
> that I not say anything until the Flyer was announced, expected to be on
> Saturday. He further said he sent out answers to requests every couple
> of days.
>
> I waited until Saturday to ask again- and sent him posts at both his AOL
> address, and at the egroups list. He has neither sent the file, or
> answered either of my posts. HIs veracity is now confirmed as
> questionable, at least in regard to any promises to make files
> available.
>
> Of course, now that Richard has made a version available, I have less
> need for the one from Chip. THey may not really be the same (Chip seems
> to imply that they give different answers), but he has effectively
> prevented me from being able to check.
>
> I have never seen any reason to doubt anything Richard has to say. Quite
> the contrary-and he is pretty good at what he does. I'm glad he is
> around, for his contributions.
>
> Bill- W4BSG

64. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399b1ff9.3265195@news.seanet.com>
Source record: 182796

On Mon, 14 Aug 2000 07:28:17 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>
>
>Fractenna wrote:
>>
>> 1) Facts are important. Putting up pirated material in order to motivate
>> someone to leave a NG is , perhaps, one of the worst aspects of ham radio and
>> the internet to date;
>>
>Did I miss something? What pirated material was put up?
>
>> Again, I MUST remind all that this is a very public forum, not a local CB
>> channel. Engineers, scientists, hobbyists, enthusiasts, the press, and many
>> others read this material seeking information.
>>
>> Chip N1IR
>
>True- One of the pieces of information often desired is an indication as
>to the veracity, dependableness, and qualifications of the source of
>info. I hate to be the bearer of this news, Chip- but you strike out
>more often than most. (Anon and Mensaboy are, perhaps, exceptions)
>
>Bill-W4BSG

Hi Bill,

Pirated material now is it? The correct vernacular for CEASE is
AVAST, no wonder that thread was meaningless.

;-) Yup, I stole it right off the screen of my display. I held a
page of paper over the image and transferred the design by eye. Of
course there were the usual obstacles put in the way (reversed
perspective components with bogus additions and such) so that my
efforts were frustrated in making an exact duplicate. I got the same
problem with my new twenties at the JiffyMart.

That did not seem to matter as far as modeling results go though,
except I improved some characteristics. As the EZNEC file I offer at
my page
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
is a DIFFERENT design (there have been no proofs to the contrary); I
freely offer it to the world for non-commercial use. Those commercial
interests that violate this will, may find themselves without legal
protection. ;-)

Enough mirth and levity, everyone back into the pool.

73's
Richard Clark, KB7QHC

p.s.
reports to the contrary
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
is still up and running with downloads to many happy parties.
Hope this helps :-)
rwc

65. Re: RICHARD CLARK Thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399c26ec.5044523@news.seanet.com>
Source record: 182797

On Mon, 14 Aug 2000 03:44:00 GMT, kk5yy@arrl.net (Gerald Schmitt)
wrote:

>
>Thank you so much for posting this. The Eznec (TM Roy Lewalen) line
>drawing sure looks familiar. I guess I'll have to fire up my Eznec 3
>and see how my old work plays.
>
>I can't quite understand Chip's gripe, you give full credit for
>the design and are complimentary.
>
>It strike me that if one did not want a web page disseminated one
>would not post a link to it but the Fract Entity often confuses me.
>
> 73 de Jerry KK5YY
>

Hi Jerry,

You are welcome of course. I'm sorry I cannot help you with
discerning the dark secrets of the interior state of another. The
rabid reaction to good news is not unusual tho' (consult DejaNews,
there are many occurrences). If it were amenable to modeling in EZNEC
3, then perhaps I might put in an hour or two on it.

Others are invited to visit
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
and observe how little controversy there actually is behind the Sturm
und Drang.

Oh, and having been remiss - a reminder to all:
DO NOT RESPOND TO TROLLS.

73's
Richard Clark, KB7QHC

66. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8n99q3arp1@slb7.atl.mindspring.net>
Source record: 182798
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Yes, the 12 gauge will easily handle 1500 watts, more actually. If you want sound antenna advice, post to the antenna group. There are some CBers that know what they are talking about but relatively few and the myths and misinformation abound.
--
CW
KC7NOD
"sideband" <sideband@cac.net> wrote in message
news:3997D536.2C30954E@cac.net...
> "Michael J.Talkington" wrote:
>
> > also with 12 gauge I have run 1500 watts pep into it!
> >
>
> I guess the question here would be, did the antenna radiate as efficiently at 1500
> watts as it did at, say, 10 watts? Or doesn't the guage of the antenna wire matter
> in reference to the power output the antenna is expected to radiate?
>
> -SSB
>
>

67. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399e2bed.6325325@news.seanet.com>
Source record: 182799

On Mon, 14 Aug 2000 11:42:41 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>
>
>Richard Clark wrote:
>>
>> You may be surprised to not see the typical knee-jerk response,
>> because I carefully and dutifully insured that ALL results conformed
>> to published characteristics.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Richard- forgive me, but the Knee-jerk from the jerk has already
>happened. One of the few mistakes you have made is in applying logic to
>an expected reaction from the Chipper. He is above and beyond logic,
>because he is a law unto himself. Fortunately, being a law unto oneself
>only has legal standing in competency hearings.
>
>I agree with all you say, and will be glad to stand up for the "prior
>art" and "improvement" and the "not obvious" parts of the situation.
>
>Bill- W4BSG

Hi Bill,

The sense of the knee-jerk response would have been to burn down the
house to kill a fly in the living room. If there are any questions
with my data that conforms quite closely to the original, then the
original must suffer equally.

Quite a paradox isn't it (and yes, Bill, I know this is your point all
along)? To this point there has been no condemnation of the data.
The pressure to maintain the original afloat has created a dynamic
tension with the desire to sink the replica. Something akin to
splitting a siamese twin that shares one head. This is the long way
of saying my data is not going to be impeached (however, Bill, I'm
sure you would be willing to place odds).

For others wondering what all the folderol is about, a visit to:
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
will reveal nothing but simple data. (Contrary to expectations, it is
still in operation and downloading the EZNEC file to happy
individuals.) Data nearly identical to the original, but in some
instances better. Those unfortunate souls seeking the heat of

controversy will probably be dumfounded by all the smoke in this forum.

And again, having been remiss, let me remind one and all once again: DO NOT RESPOND TO TROLLS.

73's
Richard Clark, KB7QHC

68. Re: Preferred Orientation of Guy-Wire Turnbuckles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <AIWl5.760$kM2.103164@newshog.newsread.com>
Source record: 182800

Why do people keep getting this idea that I'm not using safety wire?
<:-))
I even explained about the turnbuckles on the current tower and told some
one how they go on.

Man, with an installation this size there are lots of things such as
watering down the guy anchors to get the dirt to flow back in around the
block to make them more solid. (before putting side pressure on
them--tightening the guys)

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Larry Anderson" <w6lar@cybertime.net> wrote in message
news:39982015.98656452@cybertime.net...
> Same even if you use Phillystrand.......Treat the turnbuckles the same...
>
> Larry W6LAR
>
> 'Doc wrote:
>
> > Roger Halstead wrote:
> > >
> > > --
> > > Roger Halstead (K8RI) www.RogerHalstead.com
> > > N833R World's Oldest Debonair? s# CD-2
> > >
> > > "SECOPSYS" <secopsys@aol.com> wrote in message
> > > news:20000812224952.25849.00000105@ng-fk1.aol.com...
> > > > read Doc's last sentence about safety wiring 3 times....it's the
most
> > > important
> > >
> > > Unless you use Radio Shack, or equivelant guy wire!
> > >
> > > Roger (K8RI)
> > >
> > > > part of this entire "thread"
> > > > 73, Richard
> > > >
> >
> > Roger,
> > If your not using EHS guy wire, you should be. Radio Shcak doesn't
> > sell EHS guy wire.

> > 'Doc
>

69. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399835AD.F3C51A0E@usa.alcatel.com>
Source record: 182801

A resonant wire longer than a half wave is not a constant current antenna; current flows in opposite direction each 180 degrees along the wire. This applies to the array of end-fed collinear dipoles.

Consider a two element collinear. Where there is a potential, as at the end of a dipole, current will flow in every case towards or away from that point identically in any wires connected to it (but less than a half wave away). In a long wire this produces current 180 degrees out of phase between adjacent half wave sections, which is less than efficient for directivity. Therefore, another 180 degree phase shift must be added between the dipole sections. Either a stub or a tank will do that. Once this is done, current flows (for example) TOWARDS the right-hand end of the left side dipole and AWAY from the left end of the right side dipole -- which is the same physical direction in both. This is what we wanted.

Cortland
(ka5s@saber.net)

Gray Frierson Haertig wrote:

> So how is this parallel resonant circuit driving the extended element
> and enforcing the proper current phase relationship?
>
> And why doesn't this argument apply to the shorted 1/4 wave stub? Or
> does it?
>

70. Re: Excessive Receiver Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: JCColichon <jcc2NOjcSPAM@interzone.net.invalid>
Message-ID: <06c70519.a93be6ec@usw-ex0104-032.remarq.com>
Source record: 182802

Hi !

Many thanks for all the suggestions.... I will try to isolate
the origin of the noise and post it to the thread!

Best of 73's,

Juan Carlos
OA4YF

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

71. Re: Homebrew dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <lZWl5.21539$c5.912126@news2.rdc1.on.home.com>
Source record: 182803
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

CW <cmagers@sprynet.com> wrote in message
news:8n99q3arp1@slb7.atl.mindspring.net...
> Yes, the 12 gauge will easily handle 1500 watts, more actually. If you
want
> sound antenna advice, post to the antenna group. There are some CBers that
> know what they are talking about but relatively few and the myths and
> misinformation abound.
> --
> CW
> KC7NOD

Oh ya the antenna group. Been there lately? Bunch of children arguing about anything and everything. Couldn't take more than a week of reading that group. You probably will not learn much about antennas over there.

The original poster had a simple question about dipoles and the thread ends up with some dude using 2 gauge cable (bet you it's fun to work with!) and salt water and old penny grounding system!! Sounds interesting but kind of silly at the same time.

Barry D.

72. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000814144547.28098.00000361@ng-fl1.aol.com>
Source record: 182804

>Richard Clark, KB7QHC
>
>p.s.
>reports to the contrary
>http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
>is still up and running with downloads to many happy parties.
>Hope this helps :-)
>rwc

Good, Glad to hear it. Hope it stays up.

I my self am not interested, but I think it is
for the good of the NewsGroup.

I think we will ALL Learn from it.

73 Al Lowe N0IMW

73. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3998412A.5BE75946@oio.net>
Source record: 182805
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband,
Your answers;
1. Sure, no restrictions on making antennas.
2. Size of wire makes absolutely no difference as long as it
can support it's own weight.
3. Use 1/4w each side, making it a 1/2 wave antenna. This will
keep the input impedance at/near 50 ohms, and easier to match
a feed line to.
4. A dipole is 1/2 wave in length. Other lengths are called
doublets. (dipole = doublet, but doublet doesn't always = 1/2
wave.)

It sounds like it should work. Naturally, the farther an antenna is
from surounding objects, the better it works. Another point is that
the closer the antenna is to your house/apt. the more electrical noise
you will hear. Also means that you may 'get into' your/others
electrical
appliances. That's not a 'hard and fast' rule, but true most times.
Good luck...
'Doc

74. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399841DA.7C24906B@oio.net>
Source record: 182806
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband,
Efficiency of the antenna doesn't change with the amount of
power it's fed. Size of conductor makes no difference in power
handling ability at the power levels your speaking of.
'Doc

75. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <3998450D.E150C5AB@cac.net>
Source record: 182807
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

'Doc wrote:

> sideband,
> Your answers;
> 1. Sure, no restrictions on making antennas.
> 2. Size of wire makes absolutely no difference as long as it
> can support it's own weight.
> 3. Use 1/4w each side, making it a 1/2 wave antenna. This will
> keep the input impedance at/near 50 ohms, and easier to match
> a feed line to.
> 4. A dipole is 1/2 wave in length. Other lengths are called
> doublets. (dipole = doublet, but doublet doesn't always = 1/2
> wave.)
>
> It sounds like it should work. Naturally, the farther an antenna is
> from surounding objects, the better it works. Another point is that
> the closer the antenna is to your house/apt. the more electrical noise
> you will hear. Also means that you may 'get into' your/others
> electrical
> appliances. That's not a 'hard and fast' rule, but true most times.
> Good luck...
> 'Doc

Doc:

Thanks for this.

Another question, now... If the impedance isn't 50 ohms (how do you
measure this, anyway?) What would my options be to get it matched up?

TIA

-SSB

76. Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: RanHefner <ranhefnerNOraSPAM@yahoo.com.invalid>
Message-ID: <08797c75.339c014e@usw-ex0102-014.remarq.com>
Source record: 182808

Al, can you give us a source for the rods and bracket material
used in your 146/440 J-Pole?

Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

77. Re: Homebrew dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: mensaboy <garboy21NOgaSPAM@yahoo.com.invalid>
Message-ID: <0241271a.5649d117@usw-ex0107-055.remarq.com>
Source record: 182809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Part of any N.G. is just debate and junk posts. Somewhere
through it all information does leak through. What else is new.
But, as for dipoles.. they come recommended, but don't use
string, rope or spagetti. The smaller the wire the higher the Q,
but in practice you want wire that is light, remember gravity
acts on every inch.

Feed a dipole with coax unless you have a tuner and plan a long
dipole perhaps for 75 and wish to operate it multi-band.

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

78. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39984547.6B1B5DE2@oio.net>
Source record: 182810
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Tom W8JI,
Just wondering;
1.Which cheek are you using?
2.Does your tongue get tired?
3.Does the date of the pennies make a difference?
4.Should you use ordinary table salt, or 'sea' salt?
5.Do you have to clean the jug like an aquarium?
6.Would a pan under the jug (like the one under a leaking grid resistor) help?
7.I have some 6" drill stem pipe, can I run higher power with it?
8.(see #7) should I cap the ends to contain stray RF?
9.Did you take corrolis(sp) effect into concideration?
10.If you mount the antenna on a 'lazy-susan' do you get circular polarization?

'Doc
(O)(.)

79. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399847ba.59632467@news.akorn.net>
Source record: 182811

On Mon, 14 Aug 2000 11:08:45 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>180 degree phase shift must be added between the dipole sections. Either a stub
>or a tank will do that. Once this is done, current flows (for example) TOWARDS
>the right-hand end of the left side dipole and AWAY from the left end of the right
>side dipole -- which is the same physical direction in both. This is what we
>wanted.
>
>Cortland
>(ka5s@saber.net)

A tank certainly won't do it, because at resonance it appears as a
high value resistance. The electrical equiv of a resonant parallel
tuned circuit is a high value resistor. Above and below resonance, it
looks like a simple capacitor or inductor in parrale with a high value
resistor, or in series with a low value resistor.

If you ceneter tap the tank, and ground reference that point, you can
get push-pull voltages that will drive the next section.

Stubs work after a fashon, if configured correctly.

73 Tom

80. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3998479D.1B0747D9@oio.net>
Source record: 182812
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband,
The absolute best method of determining veracity when speaking electronics in this NG is to print the post, wave it over your garden... If you find 20lb. tomatoes in the morning, you know you can believe it.
'Doc
(O)(.)

81. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8n9im7$eu8$1@nnrp1.deja.com>
Source record: 182813
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Already did in a previous message. It's on the General licence exam question pool. If you have issues with that you'll need to contact the chaps that prepare the licence exams.

I'm sure it wouldn't take you too long to find aout more information on your own as well.
73 OM

In article <39973e4c.61765874@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> On Sun, 13 Aug 2000 23:23:02 GMT, Mr. Mister <kld68@my-deja.com>
> wrote:
>
> >If someone else's meter doesn't behave the way it should that meter's
> >fault not the standard's fault.
> >It's like arguing with someone with a broken calculator that insists
> >that 2.361 + 1.639 = 5.
>
> I can show you countless textbooks and references that describe how a
> calculator should process 2.361 + 1.639.
>
> Can you name a textbook, or reference book, that says 6 dB is an S
> unit? Can you explain why the scale is marked wrong on Collins
> receivers, or Drake receivers... making them absolutely impossible to
> calibrate?
>
> Thanks.
>
> 73 Tom
>

Sent via Deja.com http://www.deja.com/
Before you buy.

82. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39984D98.55182831@cac.net>
Source record: 182814
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

'Doc wrote:

> sideband,
> The absolute best method of determining veracity when speaking
> electronics in this NG is to print the post, wave it over your
> garden... If you find 20lb. tomatoes in the morning, you know you
> can believe it.
> 'Doc
> (O)(.)

Doc:

I didn't mind your levitical posts... It was obvious that you were "funning".

It's the ones that seem to make sense, then throw a monkey-wrench into the mix, phrased seriously, and providing no real help that colour my views of this NG...

Note that I didn't say HAM's... I know there's bad apples in every group... and it's that 10% that messes it up for the rest of the group... This is true in any group, of course....

Just my two cents

-SSB

83. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39984A2A.7855A22C@oio.net>
Source record: 182815

Fractenna,
I thought about making one. Does that mean your thinking
about taking me to court?
'Doc (non Ph.D.)

84. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39984C1F.1472811B@oio.net>
Source record: 182816

Fractenna,
Okay, I tried and you just don't understand...
'Doc

85. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: WildBill <wildbill@hose.com>
Message-ID: <WiYl5.5092$X66.114789@typhoon1.ba-dsg.net>
Source record: 182817
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would be a 2:1 swr ... trim each end the same or add the same to each side to get your swr down to which every frequency is of your interest..

"sideband" <sideband@cac.net> wrote in message news:3998450D.E150C5AB@cac.net...
> Doc:
>
> Thanks for this.
>
> Another question, now... If the impedance isn't 50 ohms (how do you
> measure this, anyway?) What would my options be to get it matched up?
>
> TIA
>
> -SSB
>
>

86. Re: Full Moon on the 15th

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 00:00:00 UTC
From: mensaboy <garboy21NOgaSPAM@yahoo.com.invalid>
Message-ID: <1a51b1cd.027b2b33@usw-ex0105-035.remarq.com>
Source record: 182818

Oh, is that why you're growing hair on your palms.. and I
thought it was because....

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

87. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-14 23:27:41 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <39987fa8$0$773$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182705

Hello here is the web site for Tom Mackays TGM MQ2, iam in the process of testing and using the MQ2 model in VK, it is the first mini quad of it's type i have ever had a go at,
and to be quite honest,i was very surprised on how great it worked,my reference antenna was a 4EL 6 Band Yagi a TET TE 46.by EMTRON
a great antenna even though it has traps,the MQ2 at it's worst .was only 2 S points down on RX/TX, and it was sat only 1/3 of the hight,
so i hold great expectations for the antenna once it is set on the tower at 42ft/
the idea of the exercise was to look for a small effecient antenna for town blocks and villages,this fits the bill and is still competitive.
rgds Dennis VK4SX

http://www3.sympatico.ca/t.g.m./

88. Re: TOWERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3999F0A3.3B74A82F@oio.net>
Source record: 182569

F-4 JOCK wrote:
>
> I recently had a wind storm take down my 80 ft. self supporting tower? When
> trying to locate a new 80 ft. tower I am finding nothing. Rohn goes to 64.
> American has crank ups, but no self supporting. Pirod will "make one" for
> you if given all the particulars. I first need a soil engineer to work up a
> soil report, etc. Can't I just find a new 80ft. self supporting and put it
> up? I already have an excellent base. The old tower buckled an about 40 ft.
> It ripped the bolt holes right out. That same wind also took down 13- 70 ft.
> transmission poles of the power lines. Thanks,
>
> FRED

Fred,
You may have talked to the wrong person at 'Rohn'. You may need
to talk to someone in their commercial division. Just watched them
put up a 90 foot free-stander for a cell phone site. It has four 18'
sides at the base... probably a bit more than you are looking for?
'Doc

89. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3999F295.F46DBBE2@hiwaay.net>
Source record: 182570

Many thanks, Yuri- I went there- it is obviously an OCR copy, and needs to be tidied up. That will come.

Two things of interest- The only feed method referenced is Coax (no open wire) and the assignment to FAS as owner is not there. Also, Anyone hoping for a design to make is up for dissapointment. (Sorry, Gerald)

Oh, another thing- in the spot where foreign patents in related fiels are to be given- the Fractus patents (Spanish) are NOT given. (?)

Bill-W4BSG

Blanarovich wrote:
>
> >It isn't on the patent office web site yet but they run a bit behind.
> >The number is about right for the timing. I can't wait until it's
> >posted. I've got the soldering iron all warmed up and traceable
> >field strength measuring equipment ready.
>
> it is posted at IBM site
>
> http://www.patents.ibm.com/details?&pn=US06104349__
>
> Yuri

90. Re: TOWERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <8nsjpsss7te16ai0grbg293fboo0bk12md@4ax.com>
Source record: 182571

On Sun, 13 Aug 2000 20:03:03 -0400, "F-4 JOCK" <fredpiep@bright.net>
wrote:

>I recently had a wind storm take down my 80 ft. self supporting tower? When
>trying to locate a new 80 ft. tower I am finding nothing. Rohn goes to 64.
>American has crank ups, but no self supporting. Pirod will "make one" for
>you if given all the particulars. I first need a soil engineer to work up a
>soil report, etc. Can't I just find a new 80ft. self supporting and put it
>up? I already have an excellent base. The old tower buckled an about 40 ft.
>It ripped the bolt holes right out. That same wind also took down 13- 70 ft.
>transmission poles of the power lines. Thanks,
>
> FRED
>

Did you check Trylon? I'm putting together an 80 footer right now.
And please don't tell me that's the one that collapsed...

73, Bill W7TI

91. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <u8ujpsgv7fo3qc75dhn6emfgmsr4qnlisq@4ax.com>
Source record: 182572

On Wed, 16 Aug 2000 00:48:23 GMT, jason_hsu@my-deja.com wrote:

>How precisely cut must a wire antenna be? I have heard about 1/2
>wavelength wire antennas, but if the wire must be close to this length,
>then you can only use one band or are willing to have several different
>antennas. I know that tuners are intended to correct mismatches, but I
>have heard that performance does suffer if the mismatch to be corrected
>is high enough and that an even bigger mismatch can be too much for a
>tuner to handle.

If you're feeding a half-wave dipole with 50 ohm coax, cut the dipole to 468/f to start with. For example, for 7.2 MHz, it would be 468/7.2 = 65 feet, fed in the center. This is only a starting point, however, since the exact length is affected by how close it is to the ground, trees, buildings, etc. Make it a little bit long and then using an swr meter, cut off an inch or so at a time till it's just where you want it.

You can also feed it with open wire line but you'll have a severe impedance mis-match which you'll have to correct with a tuner. The advantage of doing it this way is the length of the antenna is not critical at all and you can operate it on several bands fairly efficiently. The disadvantage is... you need a tuner. And when you have a tuner, you will be readjusting it whenever you change frequencies very much. It gets old after a while.

Generally speaking, trying to operate several bands with coax, even using a tuner, is not advised. Coax is very lossy when operated with a high swr. Most folks just use coax with a properly-trimmed dipole. Works great.

73, Bill W7TI

92. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Matt Erickson <kk5dr@hotmail.com>
Message-ID: <3999FBE4.B36FB9CC@hotmail.com>
Source record: 182573
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On HF, with in a few inches. It gets more critical as you raise in
frequency. UHF, is very critical.

jason_hsu@my-deja.com wrote:
>
> How precisely cut must a wire antenna be? I have heard about 1/2
> wavelength wire antennas, but if the wire must be close to this length,
> then you can only use one band or are willing to have several different
> antennas. I know that tuners are intended to correct mismatches, but I
> have heard that performance does suffer if the mismatch to be corrected
> is high enough and that an even bigger mismatch can be too much for a
> tuner to handle.
>
> Can anyone shed some light on this? I'm confused.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/tech-dwdm.html
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

93. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399A0076.EF1CCEFB@cac.net>
Source record: 182574

Dan Richardson wrote:

> TLA is a DOS program by Dean Straw, N6BV, the editor of the ARRL
> Antenna Book. It provides analysis of a transmission lines and
> design/analysis of antenna tuners. It is bundled with the current
> edition ARRL Antenna Book.
>
> A newer version for Windows called TLW will be bundled with the newest
> version of the Antenna book coming out soon. This version has some
> nifty features such as calculations on the fly which makes it much
> better to use.... I have had knowledge of the program (TLW) for
> sometime (beta tester) and can now, by Dean's permission, "let the
> cat out of the bag" and let you know that it is coming...
>
> A very worthwhile program for antenna experimenters.
>
> 73
> Danny, K6MHE
>
> On Tue, 15 Aug 2000 11:05:24 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >EZNEC is an antenna analysis program. You describe to the program what
> >the antenna physically looks like, and it tells you the pattern,
> >impedance, currents, and derivative information (like front/back ratio,
> >SWR, etc.). You can get info about EZNEC, and download a free demo
> >program (fully functional except limited in antenna complexity) from
> >http://eznec.com.
> >
> >I'll have to let someone else answer about TLA. I heartily recommend TA
> >(terrain analysis), though. It shows the effect of terrain of arbitrary
> >cross-section on the pattern. It uses a free-space vertical pattern from
> >EZNEC or any of Brian Beezley's modeling programs as its input. You can
> >get information about TA from k6sti@n2.net.
> >
> >Roy Lewallen, W7EL
> >
> >sideband wrote:
> >>
> >> I've seen numerous mentions of these programs (suites?) in posts here,
> >> and I'm curious... What are they? What do they do? Where can I download
> >> and/or purchase them?
> >>
> >> TIA

> >>
> >> -SSB

Thanks Dan... I'll have to buy the book when it comes out... Of course, this means I'll have to pull WINE out again and make sure it'll compile and run with the new kernel, etc.... Hopefully it'll run.. I'd hate to have to install Windows on one of my power computers just to run a single program....

Thanks again.

-SSB

94. Re: HELP: RF grounding advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <399A0607.3AAF3F31@sccoast.net>
Source record: 182575
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Roy Lewallen wrote:
>
> Thanks for the information. I hadn't
> forgotten it, I just didn't realize
> that modern radios were so poorly
> shielded and so sensitive to common
> mode current.

Well, I don't see how Yaesu could shield their FT-847 any better. It has an all metal case with 7 layers of component boards inside, with each board surrounded with its own metal shielding. In addition, a large number of the components on each board has still more shielding. Yet, this radio is really bad when it comes to poor grounding.

In Washington State, where the ground was relatively dry and rocky, I had to install a ground system consisting of multiple rods to get proper performance. On the other hand, here in South Carolina, where the soil is moist and tightly packed, a single ground rod was plenty.

In my specific radio, the results of poor ground makes itself known in the sideband performance - a slightly distorted signal. However, from what I have heard, this appears to vary with each radio (others have reported other problems, all solved with a better ground). The manual warns about this, but most (like myself) ignore it until a problem crops up.

Anyway, I'm not so sure it is poor shielding, or just a result of trying to stuff so much stuff into one radio. I don't know enough about all this to judge. But, I do know I love that radio's performance, and its capabilities. So, I can deal with this minor issue.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

95. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399A1059.89EF2FED@mindspring.com>
Source record: 182576
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Using a relative field strength meter in conjunction with an SWR meter
is a useful approach. Often, you can obtain the same low SWR reading
using very different settings of the inductors and capacitors in a
matching network, yet one of these will almost always yield by far the
highest field strength. It is instructive also that sometimes your tuner
acts like little more than a dummy load. On 40 and 15 I peg my FS meter,
with its sensitivity turned all the way down. On 80, with the sens.
control full CW, I can barely budge the needle no matter what I do. If I
relied only on the SWR meter, my feelings might be hurt that no one
answers my calls on 80 :)

de Will KD7BFX

WildBill wrote:
>
> So your saying that tuning an antenna with a swr meter is wrong ..max field
> strength does not guarantee lowest swr .. how can you go wrong by tuningan
> antenna for lowest swr
>
> > For example, some antennas are actually close to 30 ohms at resonance. You
> > will radiate more power if the antenna is tuned for a SWR of close to 2:1,
> > NOT 1:1. The problem is figuring out if that impedance is around 30 ohms
> > or around 100 ohms - using just a SWR meter.
>
> >
> > That is why it is recommended that the SWR meter is only used to make sure
> > the impedance is within the range that the transmitter can handle. Tuning
> > the antenna is done by field strength measurements - just tune for maximum
> > radiated signal, and let the SWR become whatever it becomes. If

96. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399A1CED.C1C474AE@wb6hqk.ampr.org>
Source record: 182577

> Hi Bart,
>
> You, too, have an optimistic bent. Have you gotten any clarification
> of all the good points and questions that you arose for the $1000
> challenge (which appears to be moribund)?

Not a peep.

bart
wb6hqk

97. Fractenna's EGO is shamefully LAUGHABLE!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Cory <cydag@lpaa.com>
Message-ID: <399963D7.2715967A@lpaa.com>
Source record: 182619

Doesn't chirper know we're NOT impressed AT ALL by
his delirious talk of patents. What an EGO. LOL

98. Re: THANKS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: brk <brk@westcom.net>
Message-ID: <3999687A.C8964292@westcom.net>
Source record: 182620

Fractenna wrote:

> On the day of issuance of my first antenna patent, I want to pay a special
> tribute to Chuck
>
> 73,
> Chip N1IR

No one cares about your boring garbage antennas!
All you have done is make this otherwise interesting
and informative newsgroup a place to blow your own
horn and bore everyone with your lack of knowledge!
BE ADVISED...no one on here cares what you have to say!

99. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: mickey@mouse.com
Message-ID: <39996c06@news.server.worldonline.co.uk>
Source record: 182621

"Fractenna" <fractenna@aol.com> wrote in message
news:20000814095432.04124.00001110@ng-cd1.aol.com...
> >hi, I built a fractal antenna from reading the patent
> >files on ibm patent website.
> >I guess I will be in court someday.
> >
> >I will post my findings on my website as soon as
> >I am able to start it up.
> >
> >jumbo
> >
>
>
> You will if you try to sell it or be involved in any commercial aspect.
>
> Cordially,
>
> NC

Is it patented in the UK?

If an Amateur builds one of these for himself, or a friend, I can't see how it's possible to practically enforce the patent unless NC drives around the whole of the US looking at what's on the roof.

In fact, unless you have permission to go up onto people's roofs, enter their property, etc., you're on a hiding to nothing.

Seems NC is more worried about bad publicity, and making silly contributions like he has to various NG's frequented by Amateurs isn't going to sell the product.

If you can't stand independent critique then you shouldn't try something new.

100. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: mickey@mouse.com
Message-ID: <39996f39@news.server.worldonline.co.uk>
Source record: 182622

"Chris" <chrisml@clearnet.co.nz> wrote in message
news:vmdipssildgv56t9gkbocpua8l5f3ienqj@4ax.com...
> I've recently gained my ham license. I have various wide-band scanner
> antennas from earlier scanning days. Apart from the SWR
> considerations, is there any danger to my new amateur radio equipment
> in using a scanner antenna for transmitting in the 2 metre and 70cm
> amateur bands?
>
> Chris L

Yes you can, but I don't think anyone would recommend it.

You are risking that new amateur equipment unnecessarily, if you do use it,
then use your lowest power for very short qso's.

101. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3999658e.459010@news.seanet.com>
Source record: 182623

On Tue, 15 Aug 2000 03:43:40 GMT, ehsjr@bellatlantic.net wrote:

>Richard,
>
>What am I missing? This is an antenna with negative gain
>that hears worse in one direction than another, is the devil
>to build (by comparison to others), is extremely sensistive
>to the environment, and is difficult, if not impossible, to rotate.
>
>Did I get that right? If so, what am I missing? Why would
>anyone want such an antenna? Is it just the fact that it
>occupies a small space? I've been trying to figure out what
>benfits, if any, can be realized with a fractal design. Chip
>has been completely useless in helping me in this - I hope
>you can. Thanks!
>

Hi OM,

All that you say is true, however, it doesn't necessarily disqualify an antenna as being useless.

Occupying a small space is an asset to many, having a match is another asset. If one is educated to the cost of such assets, then the informed Ham can make an educated choice. As I pointed out elsewhere, this antenna is probably more suitable for receiving than for transmitting if one is terribly conscious of efficiency (which, actually doesn't go very far as an argument).

Now as to the matter of being able to turn it. That is a matter not of terrible concern to a designer, it being more so the implementor's problem. This disconnect may seem brutal, but it is often the case that an inventor entirely oblivious to the real needs of his customers often finds a less than bright (in the inventor's estimation of course) huckster can move these twisted resistors by the carload by including a pail of lossy dirt.

Does anyone believe that it is an easier job to fashion an 80M version than simply lay ground radials against any handy vertical radiator? No, and how many builders to the 10M version are going to tolerate the loss of planting a dwarf in their garden a half inch above the soil when a six foot elevation would offer so much more? Of course they lose the F/B at the cost being able to hear better; they also lose the convenient match afforded by the ground providing half the match.

Such a quandary. But if the user has none of these options in the first place, the original position seems to glow. Too much attention is paid for these concerns, but people are concerned none the less. Consider if you worry about a 6 dB loss getting a signal out of the antenna; then how do you feel about the 100 dB loss getting a signal out beyond 10 miles?

73's
Richard Clark, KB7QHC

102. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399a6b49.1926390@news.seanet.com>
Source record: 182624

On 15 Aug 2000 03:11:16 GMT, tellacom99@aol.com (Tellacom99) wrote:

>That's quite a design Richard, You did a cool job on it. Congrats on the new
>antenna.
>

Hi OM,

You are welcome. Feel free to use the design if you wish, please
observe the cautionary statements and be doubly aware of the high
losses presented to maintain the characteristics. Also do not be put
off by the high sensitivity to ground (that is, sudden losses of gain,
or poor F/B with variations in the antenna's relation to ground).

Some may recall the experience of Jean Michel's implementation of the
non-fractal version and how difficult he found to bring it to match.
With the perspective of earth in mind, this could be anticipated and
"optimized(?)" again.

73's
Richard Clark, KB7QHC

103. Re: Instructions for MFJ 940 Tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <39998689$3$vtanpl$mr2ice@news.uga.edu>
Source record: 182625

I asume that you want to use the tuner for receiving and that the tuner is T type, with switched coil and two variable capacitors. If the antenna is long enough, usually the tuner usually does not impove the reception much. If the antenna is short, set the antenna capacitor at maximum, and manipulate the transmitter capacitor and the coil for maximum signal strength. Ignacy, NO9E
no9e@arrl.net

104. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: RanHefner <ranhefnerNOraSPAM@yahoo.com.invalid>
Message-ID: <0236dba0.8e71a972@usw-ex0102-014.remarq.com>
Source record: 182626

It depends on the antenna. Most discones will work fine on 2-
meter, 440, 900 and 1.2ghz. The Radio Shack telecsoping scanner
antenna will work on 2-meter and 440.

Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Got questions? Get answers over the phone at Keen.com.
Up to 100 minutes free!
http://www.keen.com

105. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8nbt8a$50e$1@news.tribune.com>
Source record: 182627

If it is a DISCONE with the proper frequency range, transmit away!
Otherwise be sure to cut the antenna and its ground radials to the proper
length.
KA9CAR

Chris <chrisml@clearnet.co.nz> wrote in message
news:vmdipssildgv56t9gkbocpua8l5f3ienqj@4ax.com...
> I've recently gained my ham license. I have various wide-band scanner
> antennas from earlier scanning days. Apart from the SWR
> considerations, is there any danger to my new amateur radio equipment
> in using a scanner antenna for transmitting in the 2 metre and 70cm
> amateur bands?
>
> Chris L

106. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39997DDE.5270D4BB@usa.alcatel.com>
Source record: 182628

Yes, you certainly can. The Radio Shack magnetic mount scanner antenna is even rated for transmitting. The original one was tested by someone with similar questions and turned out to show a low SWR in the Amateur 6 meter, 2 meter and 440 MHz bands. Radio Shack now sells this as a transmitting antenna good up to (I think) 25 watts. However, I don't think this is available in NZ.

If you have an outdoor scanner antenna, and a SWR meter, why not try it and see? It's unlikely you will have an SWR worse than 3:1 and if you do, stop transmitting; your question will have received a negative answer. Modern radios can take that for quite a while anyway. If it's less than 2:1, and the results on the air please you, then you have received an affirmative answer.

The thing to beware of is small mobile or indoor scanner antennas which may contain very small diameter conductors. These could burn out if you transmit into them.

Cortland
(ka5s@saber.net)

Chris wrote:

> I've recently gained my ham license. I have various wide-band scanner
> antennas from earlier scanning days. Apart from the SWR
> considerations, is there any danger to my new amateur radio equipment
> in using a scanner antenna for transmitting in the 2 metre and 70cm
> amateur bands?
>
> Chris L

107. Re: Stealth Aerials & Flingshots

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <39997ea4.184256056@news.galilei.com>
Source record: 182629

Hi David

You will be surpised at how long the enamel coating lasts outdoors!

TTUL
Gary

108. Re: Stealth Aerials & Flingshots

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399b7e1f.6748353@news.seanet.com>
Source record: 182630

On Tue, 15 Aug 2000 08:55:53 -0400, "David J. Windisch"
<davidw@copper.net> wrote:

>Wound about 200 yards of wirewrap wire on my homebru version flingshot's
>reel. Seemed about the same weight as the 10-lb nylon line it replaced.
>
>2-oz weight used; first try, put about 100 yds of wire atop a line of trees.
>Put another hundred in the opposite direction. Now have a 200-yd dipole
>facing N/S. Wonder how long it'll last in the .-- -..- ..--..
>
>It certainly can't be seen easily, even though I used bright orange wire!
>
>CU on 40CW
>
>73, Dave, K3BHJ
>

Hi Dave,

This could last A VERY LONG TIME.

At least mine did until the winter storms last year broke several
trees 20 feet up. Of course one tree fell across the ascending line
and thwack! my driveline was pulled to max strain (and beyond).

I have one broken tree that still resides in the canopy, ridgepole
style (the trunk is easily 30 feet long and held in the other trees'
branches 20 feet up). Been that way for more than a year (it was
another tree that actually broke the line).

Anyway, it was a strong performer for such a simple cast.

73's
Richard Clark, KB7QHC

109. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399c7f9b.7128309@news.seanet.com>
Source record: 182631

On Tue, 15 Aug 2000 08:15:37 -0700, Bart Rowlett
<bart@wb6hqk.ampr.org> wrote:

>Fractenna wrote:
>>
>> Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have a
>> post from a newcomer asking 'what's better'?
>
>It's interest to note the newcomer has apparently never posted to Usenet
>before and coincidentally, posted from one of the same servers you
>usually post from.
>
>> Why do we not have an answer for this?
>
>> Could it be that, for those who must deal with low heights, a directional
>> antenna with equivalent, or nearly equivalent field strength at low (DX) angles
>> to a 1/4 wave monopole--virtually twice as high--is NOT advantageous?
>
>> Or are those who want to hoodwink fellow hams that a new technology is a
>> useless one-- do they want to keep other IGNORANT?
>
>What new technology? It sounds like you are claiming the K2 Fractal
>Flyer, whatever that is, outperforms more conventional antenna systems
>meeting the same constraints.
>
>If you really want to challenge the rraa community, you might want to
>state both the objective function (Figure of Merit) and the
>constraints. The definitions should be formal enough so that anyone
>skilled in the art can objectively and unambiguously apply the
>definitions to any candidate antenna system.
>
>> Go try it yourself, over real ground:
>>
>> Model an /18 wave monopole, with, say, 8-10 radials;
>> Model a low dipole up 1/8 wave;
>> Model a sloping dipole up 1/8 wave;
>> Model a horizontal loop up 1/8 wave;
>> Model a mobile whip with radials;
>> Model any other antenna in a small footprint and low height.
>
>Looks like the primary constraint is that the antenna will be sited over
>a 'real ground' and must be fully enclosed in a box 1/8 wl high X 1/2 wl
>long X 1/4 wl deep.
>

>Am I correct?
>
>Good engineering practice would be to softly constrain the system to be
>'easy' to construct and maintain; structural simplicity and
>straightforward tuneup is a necessity for many radio amateurs. I assume
>the system should maintain the desirable (objective) properties over
>typical environmental variations such as rain, ice, wind and snow.
>
>> Model these over poor to good ground and look at the field strength at low
>> angles, say 5-15 degrees.
>
>I take it that the objective is to generate as much radiation at takeoff
>angles in the range 5 to 15 degrees. To what extent, if any, is
>directivity desirable?
>
>bart
>wb6hqk

Hi Bart,

You, too, have an optimistic bent. Have you gotten any clarification of all the good points and questions that you arose for the $1000 challenge (which appears to be moribund)? The questions above have the same sane and careful attention to the real matter, but track records being what they are....

The problem with your expectation is that you are under the presumption there is some "science" behind these choices of antennas offered for review. Bart, these examples are nothing more than discoveries obtained by wading through un-revealed candidates. This is called Hi-grading and is a sham of what is being presented as an objective approach.

If you note the "qualifications" of either the challenges or the offerings for review; they all come with the attending crowing about no other design besting it within certain constraints (the same as the antenna under consideration, often). That is, all the commendable issues you list above are found AFTER the candidates have been put through the sieve, not before. As such, this quality of research offered is found in the luck of the draw, and not through some formalistic and rigorous survey.

73's
Richard Clark, KB7QHC

110. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39998664.FC4329BA@eznec.com>
Source record: 182632

EZNEC is an antenna analysis program. You describe to the program what the antenna physically looks like, and it tells you the pattern, impedance, currents, and derivative information (like front/back ratio, SWR, etc.). You can get info about EZNEC, and download a free demo program (fully functional except limited in antenna complexity) from http://eznec.com.

I'll have to let someone else answer about TLA. I heartily recommend TA (terrain analysis), though. It shows the effect of terrain of arbitrary cross-section on the pattern. It uses a free-space vertical pattern from EZNEC or any of Brian Beezley's modeling programs as its input. You can get information about TA from k6sti@n2.net.

Roy Lewallen, W7EL

sideband wrote:
>
> I've seen numerous mentions of these programs (suites?) in posts here,
> and I'm curious... What are they? What do they do? Where can I download
> and/or purchase them?
>
> TIA
>
> -SSB

111. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39998974.B27AD83E@eznec.com>
Source record: 182633

I'm uncomfortable with anyone depending on EZNEC or any of the modeling programs to give precise results when the accuracy depends critically on ground characteristics. These programs all make the assumption that the ground is perfectly flat, and homogeneous to an infinite depth. In average soil, the skin depth is about 16 feet at 3.5 MHz, so there's considerable current at over 20 feet depth. Ground is often stratified, unlike the model. Even if you knew the conductivity and dielectric constant of each stratum, I'm not entirely convinced that you can replace it with a single "equivalent" homogeneous ground and get equivalent results. And in an urban environment, there are often other buried conductors within the antenna's field. So whenever you see a design which the model shows depends critically on the ground characteristics, expect to do some tweaking at best. But you might not be able to achieve the model results at all.

Roy Lewallen, W7EL

112. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <399d8cbe.10491465@news.seanet.com>
Source record: 182634

On Tue, 15 Aug 2000 11:18:28 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm uncomfortable with anyone depending on EZNEC or any of the modeling
>programs to give precise results when the accuracy depends critically on
>ground characteristics. These programs all make the assumption that the
>ground is perfectly flat, and homogeneous to an infinite depth. In
>average soil, the skin depth is about 16 feet at 3.5 MHz, so there's
>considerable current at over 20 feet depth. Ground is often stratified,
>unlike the model. Even if you knew the conductivity and dielectric
>constant of each stratum, I'm not entirely convinced that you can
>replace it with a single "equivalent" homogeneous ground and get
>equivalent results. And in an urban environment, there are often other
>buried conductors within the antenna's field. So whenever you see a
>design which the model shows depends critically on the ground
>characteristics, expect to do some tweaking at best. But you might not
>be able to achieve the model results at all.
>
>Roy Lewallen, W7EL

Hi Roy,

What you say about the connect between modeling and reality is a
necessary warning coming at the right time.

I am confident in that the reporting of other implementors with their
difficulties described much in the same tenor as your cautionary
statements above strikes to the very heart of the matter. As to
precision, I have no illusions as to this issue.

However, if we were to remain implementation neutral, and IF there are
no program oddities that relate to presumptions made; then we have us
the basis for a decent comparison. My reliance on a perfect ground
with my fractal surveys was done principally for speed. Behind that
practical concern is the logic that if my modeled antenna suffers for
some reason, then the standard antenna suffers equally (and presumably
for the same reason). There are certainly differences that could clash
with this expectation, but I am willing to discuss them if the time
comes.

As such, until this review of the k2, I rarely consider "real" ground.
The difference with this model is in its tightly bound to ground
nature to supply all the key characteristics. Arguments made over
differences in ground are bound to lead to no conclusion at all -
ground is too variable as you point out above. Thus I am satisfied to
allow the defaults for "real" ground to sail right through (which is

to say, these defaults constitute the standard for my grounds - if and when I choose to consider it).

73's
Richard Clark, KB7QHC

113. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <aofm5.1626$x16.110048@monger.newsread.com>
Source record: 182635

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3999658e.459010@news.seanet.com...
> On Tue, 15 Aug 2000 03:43:40 GMT, ehsjr@bellatlantic.net wrote:
>
> >Richard,
> >
> >What am I missing? This is an antenna with negative gain
> >that hears worse in one direction than another, is the devil
> >to build (by comparison to others), is extremely sensistive
> >to the environment, and is difficult, if not impossible, to rotate.
> >
> >Did I get that right? If so, what am I missing? Why would
> >anyone want such an antenna? Is it just the fact that it
> >occupies a small space? I've been trying to figure out what
> >benfits, if any, can be realized with a fractal design.

Think of squeezing a very small version of an antenna into *very* limited
space.

Forget about ham bands and think small.

Roger (K8RI)

>> Chip
> >has been completely useless in helping me in this - I hope
> >you can. Thanks!
> >
>
> Hi OM,
>
> All that you say is true, however, it doesn't necessarily disqualify
> an antenna as being useless.
>
> Occupying a small space is an asset to many, having a match is another
> asset. If one is educated to the cost of such assets, then the
> informed Ham can make an educated choice. As I pointed out elsewhere,
> this antenna is probably more suitable for receiving than for
> transmitting if one is terribly conscious of efficiency (which,
> actually doesn't go very far as an argument).
>
> Now as to the matter of being able to turn it. That is a matter not
> of terrible concern to a designer, it being more so the implementor's
> problem. This disconnect may seem brutal, but it is often the case

> that an inventor entirely oblivious to the real needs of his customers
> often finds a less than bright (in the inventor's estimation of
> course) huckster can move these twisted resistors by the carload by
> including a pail of lossy dirt.
>
> Does anyone believe that it is an easier job to fashion an 80M version
> than simply lay ground radials against any handy vertical radiator?
> No, and how many builders to the 10M version are going to tolerate the
> loss of planting a dwarf in their garden a half inch above the soil
> when a six foot elevation would offer so much more? Of course they
> lose the F/B at the cost being able to hear better; they also lose the
> convenient match afforded by the ground providing half the match.
>
> Such a quandary. But if the user has none of these options in the
> first place, the original position seems to glow. Too much attention
> is paid for these concerns, but people are concerned none the less.
> Consider if you worry about a 6 dB loss getting a signal out of the
> antenna; then how do you feel about the 100 dB loss getting a signal
> out beyond 10 miles?
>
> 73's
> Richard Clark, KB7QHC

114. Twin-ax.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39998F82.75E08A65@roadrunner.nf.net>
Source record: 182636

Other day in a junk store I saw a plastic bag containing some 30 to 50
feet of twin-ax such as is/was used by IBM computer systems and several
of those connectors that at fisrt glnace look like 'N' coaxial
connectors, but have two pins.
Does this have any RF use e.g. as a 'ba;lanced' feeder to an antenna
(receiving only) and if so what would be the characteristic impedance?
In other words should I go back and offer him 5 bucks?
Comments welcomed. Thanks.
Terry S.

115. Re: Telescoping antenna masts..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: jack albert <jwa@tellabs.com>
Message-ID: <Gzgm5.10$xx3.112@wdc-read-01.qwest.net>
Source record: 182637

I think he's looking for this

http://www.bright.net/~kanga/kanga/dk9sq.htm

Jack
WA9fvp

Bill P. wrote in message ...
>There is a new fiberglass telescoping mast out of Germany. Saw it
somewhere
>on the web recently. Try a search.
>
>
>
>

116. Radial lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <399997C1.903DDED5@aztek-eng.com>
Source record: 182638

I am helping a person put up a low profile antenna which will be
an inverted L (30' high & 60' total length) fed against ground
and matched with a tuner. Given that he would like to load it
on all HF bands (except for 160m) and will probably only opt for
only 6 or 8 radials, what would be the preferred radial lengths?
Initially I thought that 1 for each band of 1/4 wavelength + 5%
and then thought that a few longer ones would be better.

Thanks,
Larry, W0QE

117. Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Perge <perge@attglobal.net>
Message-ID: <3999B445.7B8@attglobal.net>
Source record: 182639

Comments from Butternut vertical antenna users- Good,bad,worth the money,any tuning problems,ground mounted vs. tower mounted etc...?
Thanks,Joe

118. Re: Answer to Chip's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000815163923.29174.00000024@ng-fm1.aol.com>
Source record: 182640

>Subject: Answer to Ed's question
>From: fractenna@aol.com (Fractenna)
>Date: Tue, Aug 15, 2000 5:44 AM
>Message-id: <20000815074414.11447.00000207@ng-mf1.aol.com>
>
>Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have
>a
>post from a newcomer asking 'what's better'?

>Snip<

> Then tell how the K2 Fractal Flyer compares.
>
>73,
>Chip N1IR

Again Chip posts with a different screen name, and thinks
everyone is Stupid and won't notice.

Only a real stupid person would not know when to quit.

73 Al Lowe N0IMW

119. Re: THANKS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000815170241.10494.00001232@ng-da1.aol.com>
Source record: 182641

Here's a S.I. Hyakawa lesson in semantics for any cunning linguists lurking out there:

"On the day Hell freezes over, I want to pay a special tribute to Rosy O'Donnell. She's a pearl of a girl and I really love her jokes.

Does that mean hell froze? Nope.

Were those nice words my "tribute"? Nope.

What might my special tribute be? Could be I'm planning a Bronx cheer and rude comment about her fat ass! Class dismissed.

Rick K1BQT

120. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <77CZORi6RoxLB8SeQj7OFYKJhOw+@4ax.com>
Source record: 182642

On Tue, 15 Aug 2000 02:11:59 GMT, K5WX <keithk5wx@aol.com> wrote:

>Very good, Richard! I'm a QRP operator with limited space and am always
>looking for the next new antenna to give me an edge. I just worked several
>stations in Europe tonight with 1 watt to an Inverted Vee. I appreciate the
>information and explanations that you are providing to the group. I'll stick
>with my Inverted Vee a bit longer.
>
>By the way, check out the nostalgia at http://www.charlesatlas.com/ .
>
>73,
>
>Keith, K5WX
>

Hi Keith,

Thanx for the link. It's just like the old days when I saw this graphic in boy's magazines (OK, so they were funny books).

73's
Richard Clark, KB7QHC

121. Re: Radial lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3999B608.7E586347@eznec.com>
Source record: 182643

If the radials are right on the ground or buried (even slightly), they won't exhibit any substantial resonant effects. So the longer they are, the better. You do reach the point of diminishing returns fairly quickly, though, so making them much longer than around 1/4 free-space wavelength or so won't help much unless you have a large number of radials -- but it won't hurt, either. The number really required depends on what the antenna's feedpoint resistance is on each band. You can get this information with modeling if you want. But 6 or 8 radials will probably get you within a couple of dB of a perfect ground system. Make them all as long as practical, but making them longer than about 1/4 free-space wavelength on 80 meters would largely be a waste of wire.

Roy Lewallen, W7EL

Larry Benko wrote:
>
> I am helping a person put up a low profile antenna which will be
> an inverted L (30' high & 60' total length) fed against ground
> and matched with a tuner. Given that he would like to load it
> on all HF bands (except for 160m) and will probably only opt for
> only 6 or 8 radials, what would be the preferred radial lengths?
> Initially I thought that 1 for each band of 1/4 wavelength + 5%
> and then thought that a few longer ones would be better.
>
> Thanks,
> Larry, W0QE

122. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: mmwallace120741@aol.com
Message-ID: <20000815173842.12072.00000708@ng-cc1.aol.com>
Source record: 182644

Been reading the mail. At least N1IR gave something to test.Got the mfj 224 up and tested the flyer to a vertical with 8 radials on 52 direct. Have a flat grassy backyard here.

From 70 ft away the flyer has a gain down by less than 1/2 to 1 db from the vertical and the backside is down 11 to 12 db. I used a 4 element beam on the rx end and my beam was up 15 feet.

Make your own conclusions. Just keep me out of the hate fest.

MarkW

123. PCR-100

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Peter <ve9ptr@hotmail.com>
Message-ID: <I9jm5.3329$bW2.26661@sodalite.nbnet.nb.ca>
Source record: 182645
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I'm looking for any thoughts or comments on this PC controlled radio from ICOM....

Pete

124. Remember those GOTHAM verticals...???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: JGinNY <jwg6@cornell.edu>
Message-ID: <3999C4BF.242C5BD5@cornell.edu>
Source record: 182646

Are they still around? They were for so long a fixture in the
advertising pages of QST.

I have some questions about those antennas:

They were advertised as multi-band, trapless jobs. According to one of
their ads, the thing was like 23 feet long,
requred NO radials, and was fed with good ol' low-impedance COAX
cable.

Question: How could it be run as a multi-band ant with just co-ax??

The aforementioned ad stated that for 80 and 40 meters, a tap location
was found experimentally on the loading coil, to give a proper match on
those bands.

On the higher-freq. bands, the antenna system relied on an ATU _or_ the
pi-network at the output of the rf amp, to provide matching.

I don't understand how the coax could act as an efficient transmission
line, especially in the latter case (on 20/15/10).
Wouldn't it have been much more efficient if the trans. line in that
case was an open-wire parallel feeder? Wouldn't coax have been really
lousy, in comparison? Wouldn't the losses due to a (I would expect)
very high SWR on the line, be considerable? Why co-ax, then?

Considering it in another way -- on 40 and 80 meters, say the radiator
with loading coil amounted to an electrical quarter wavelength. OK.
Then it would be compatible with 50-ohm co-ax. BUT that would require a
ground/radial system -- no? How could it be an effective system, on
those bands then, _without_ any radials?

Very interested to hear what the deal was, behind this ant. Always
sounded a little too good to be true...

Anybody got the scoop on this?

thanks all
73

Joel
N1AEP
nr. Ithaca

125. Re: Remember those GOTHAM verticals...???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: The Green Hornet <jlockett@onemain.com>
Message-ID: <ixjm5.25016$B86.779698@nntp2.onemain.com>
Source record: 182647

The reason they arn't around is they weren't worth a darn. No vertical (1/4 wave) works worth a darn on the ground without radials....

--
jlockett@lightspeed.net

"JGinNY" <jwg6@cornell.edu> wrote in message news:3999C4BF.242C5BD5@cornell.edu...
> Are they still around? They were for so long a fixture in the
> advertising pages of QST.
>
> I have some questions about those antennas:
>
> They were advertised as multi-band, trapless jobs. According to one of
> their ads, the thing was like 23 feet long,
> *requred NO radials*, and was fed with good ol' low-impedance COAX
> cable.
>
> Question: How could it be run as a multi-band ant with just co-ax??
>
> The aforementioned ad stated that for 80 and 40 meters, a tap location
> was found experimentally on the loading coil, to give a proper match on
> those bands.
>
> On the higher-freq. bands, the antenna system relied on an ATU _or_ the
> pi-network at the output of the rf amp, to provide matching.
>
> I don't understand how the coax could act as an efficient transmission
> line, especially in the latter case (on 20/15/10).
> Wouldn't it have been much more efficient if the trans. line in that
> case was an open-wire parallel feeder? Wouldn't coax have been really
> lousy, in comparison? Wouldn't the losses due to a (I would expect)
> very high SWR on the line, be considerable? Why co-ax, then?
>
> Considering it in another way -- on 40 and 80 meters, say the radiator
> with loading coil amounted to an electrical quarter wavelength. OK.
> Then it would be compatible with 50-ohm co-ax. BUT that would require a
> ground/radial system -- no? How could it be an effective system, on
> those bands then, _without_ any radials?
>
> Very interested to hear what the deal was, behind this ant. Always

> sounded a little too good to be true...
>
> Anybody got the scoop on this?
>
> thanks all
> 73
>
> Joel
> N1AEP
> nr. Ithaca
>
>
>

126. Re: Instructions for MFJ 940 Tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: ed <ewindes@my-deja.com>
Message-ID: <8nci1q$u0p$1@nnrp1.deja.com>
Source record: 182648

In article <3998774d.3176888@news.crosslink.net>,
nobody@crosslink.net (Robert Lay) wrote:
> On Mon, 14 Aug 2000 20:35:28 GMT, ed <ewindes@my-deja.com> wrote:
>
> >Anyone able to give me a quick summary of how to adjust this tuner?
>
> Methinks thou hast upgefucked. There is no such model tuner in the MFJ
> arsenal, unless it is some hopelessly out of date model - not that the
> old ones don't work just as well as the new ones.

Yes, it is "hopelessly out of date". If it were relatively recent, I'd
hit MFJ's web site and download the nice online manuals...

> >I understand the Transmitter/Inductance/Antenna adjustment - and how
> >adjust during recieve for maximum signal.
> >
> >I don't understand how to adjust the "Power" knob (which pulls out in
> >addition to rotating) and how to read SWR/Power off the meter.
>
> Any reference to Power or SWR is a reference to sending a signal OUT -
> in other words, TRANSMITTING. I have to wonder whether or not you are
> licensed for that, since licensed operators usually put their
> callsigns into their posts

N9EDW. Is the attitude necessary?

> If the knob that you refer to as the "Power" knob is what it used to
> be on some earlier tuners, it was the means of calibrating to full
> scale on a forward power setting so that when you measured the
> reflected power it would show up on the meter as SWR. This was before
> the advent of the twin needle meter, which made all those steps
> unnecessary.

It is a single-needle meter. I haven't used one before, and was
hoping someone would be familiar with the calibration.

Sent via Deja.com http://www.deja.com/
Before you buy.

127. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <3999c5cf.46529761@news.akorn.net>
Source record: 182649

On 15 Aug 2000 21:38:42 GMT, mmwallace120741@aol.com (MMwallace120741) wrote:

>Been reading the mail. At least N1IR gave something to test.Got the mfj 224 up
>and tested the flyer to a vertical with 8 radials on 52 direct. Have a flat
>grassy backyard here.
>
>From 70 ft away the flyer has a gain down by less than 1/2 to 1 db from the
>vertical and the backside is down 11 to 12 db. I used a 4 element beam on the
>rx end and my beam was up 15 feet.
>
>Make your own conclusions. Just keep me out of the hate fest.
>
>MarkW

Hi Mark,

It sounds like you tested the antenna on two meters. Is that correct?

How high above the dirt was it?

How high was the vertical?

Thanks, Tom

128. Re: PCR-100

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: mthompson14@yahoo.com
Message-ID: <3999c1c4.2231393@news-server>
Source record: 182650
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hello,

I just recently purchased an Icom PCR-100. Couldn;t wait to
get it home and hook it up. Keep in mind I'm new to Radio so take my
comments for what they are worth.

I'm pretty pleased with its performance. This is a good radio
for the beginner. One thing I don;t like about this radio is that it
only has FM WFM and AM, there is no SSB or CW reception, and becasue
of this I'm missing out on alot.

The documentation only garuntees this radio to receive as low
as 500KHz. I have successfully tuned mine down to about 30KHz. Loran
at 100KHZ being predominatly strong.

If you don;t mind dropping the extra money I would suggest
buying the PCR-1000 this has the added benifit of CW and SSB
reception. Also if you purchase outside the US you can get these
radios unblocked meaning you can receiver cellular phones, if thats
your thing.

Another thing you might want to take into consideration is,
that I have heard rumors that this receiver gets alot of noise coming
from the serial port of the PC it is hooked up to. I myself have not
noticed anything but then again I'm no elmer:P

Hope this helps
Mike T.

On Tue, 15 Aug 2000 22:06:32 GMT, "Peter" <ve9ptr@hotmail.com> wrote:

>I'm looking for any thoughts or comments on this PC controlled radio from
>ICOM....
>
>Pete
>
>

129. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Larry Bratcher <LABratcher@worldnet.att.net>
Message-ID: <PXjm5.9702$4T.582880@bgtnsc07-news.ops.worldnet.att.net>
Source record: 182651

I have a Butternut HF6V which I'm very well pleased with! I did a lot of research before buying and all indicators say the Butternut is the best vertical on the market. Of course, I would like a beam with a rotor but can't have it in my neighborhood. Follow the instructions for tuning and you won't need a tuner except for maybe the lower bands. I have my ground mounted with about 8 radials of diferent lengths in a pie shape around the base. All in all, if you want or need a vertical, get the Butternut.

"Perge" <perge@attglobal.net> wrote in message
news:3999B445.7B8@attglobal.net...
> Comments from Butternut vertical antenna users- Good,bad,worth the
> money,any tuning problems,ground mounted vs. tower mounted etc...?
> Thanks,Joe

130. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <3999CCDD.B70146D0@cac.net>
Source record: 182652

Roy Lewallen wrote:

> EZNEC is an antenna analysis program. You describe to the program what
> the antenna physically looks like, and it tells you the pattern,
> impedance, currents, and derivative information (like front/back ratio,
> SWR, etc.). You can get info about EZNEC, and download a free demo
> program (fully functional except limited in antenna complexity) from
> http://eznec.com.
>
> I'll have to let someone else answer about TLA. I heartily recommend TA
> (terrain analysis), though. It shows the effect of terrain of arbitrary
> cross-section on the pattern. It uses a free-space vertical pattern from
> EZNEC or any of Brian Beezley's modeling programs as its input. You can
> get information about TA from k6sti@n2.net.
>
> Roy Lewallen, W7EL
>
> sideband wrote:
> >
> > I've seen numerous mentions of these programs (suites?) in posts here,
> > and I'm curious... What are they? What do they do? Where can I download
> > and/or purchase them?
> >
> > TIA
> >
> > -SSB

Appreciate this info, Roy.

I guess what this boils down to, and I should have posted it this way in the first place, is What would be the best and easiest way to model the dipole we've been discussing in the other thread (Homebrew Dipole)?

Which program is more "user friendly" and will show me a radiation pattern based on a vertical dipole

Thx, and 73.

-SSB

131. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <3999cc79.204184001@news.galilei.com>
Source record: 182653

Hi Joe

I have a ground mounted Butternut HF9V, it's been up over 2 years now
and I couldn't be more pleased with it.

Best store bought antenna I ever finally figured out how to get
together, hi hi.....

TTUL
Gary

132. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: jh-lewis <jh-lewis@swbell.net>
Message-ID: <sekm5.57$ud6.60645@nnrp1.sbc.net>
Source record: 182654

My HF6V has been operating for about 7 years now and I'm very happy with it's performance. Over the years I've compared Cushcraft, and GAP antennas, and ended up keeping the Butternut.

Mine is ground mounted with about 32 buried radial wires (laid out in a spoke fashion) and works like a charm for DX.

Best bang for the buck antenna on the market - but - I won't sit here and say there is a tremendous amount of difference between it and a wire antenna, if you have room to put on up. That debate has been going on for a long long time. Various comparisons (I like fiddling with antennas) between my HF6V and a G5RV (102') and a 125' long wire had the vertical and wire antennas running neck and neck in most instances. And putting up a dipole or G5RV is a heck of a lot cheaper than any commercial vertical.

For an excellent vertical go with the Butternut, but first, play around with some wire...

John

Perge <perge@attglobal.net> wrote in message
news:3999B445.7B8@attglobal.net...
> Comments from Butternut vertical antenna users- Good,bad,worth the
> money,any tuning problems,ground mounted vs. tower mounted etc...?
> Thanks,Joe
>

133. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000815192901.18711.00000004@ng-fg1.aol.com>
Source record: 182655

>
>>Make your own conclusions. Just keep me out of the hate fest.
>>
>>MarkW
>
>Hi Mark,
>
>It sounds like you tested the antenna on two meters. Is that correct?
>
>How high above the dirt was it?
>
>How high was the vertical?
>
>Thanks, Tom
>

Tom, looks like you fell for another Freak alias :-)))

134. EZNEC Q?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000815194723.18711.00000009@ng-fg1.aol.com>
Source record: 182656

I am plunging into intricacies of antenna modeling using EZNEC.
Have some questions:

1. I see that metric formula for wavelength is not 300/f as we used to use.
What is the reason for 298 something, air dielectric? More precise speed of
light/RF?

2. When modeling quad loops, what are the recommended segment length in the
vicinity of the corners? I understand that programs are having problems with
sharp wire corners. Say recommendation for 15m loop.

3. Resultant pattern plots, are they containing both polarizations, or is there
way to see each polarization separately?

4. With windows version, is it possible in the near fututre to see results of
wire manipulation by mouse on the SWR and pattern plots? It would be really
neat for optimization exercises.

Yuri, K3BU

135. FA TOWER-COAX-ACCESORIES ANDREWS-SLACAN

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: chris fox <cfox007@bellsouth.net>
Message-ID: <3999D9BC.2BA1ED69@bellsouth.net>
Source record: 182657

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=409843376

136. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3999CE88.42EB4877@dialpoint.net>
Source record: 182658

If you check the SWR and probably keep the power under 50 watts or so the antennas should not harm the rigs at all. Some antennas will not handle very much power. Over the last 25 or so years as a ham I have used just about anything that was handy IF the SWR was under 2:1 over the band.

They may or may not give the performance of an antenna designed for the ham bands. Doing a compairison one day with a friend and changed several antennas on his car and checked several repeaters. It depended on where the repeater was in relationship to the car as to which one gave the best signal. On a whime we checked the 40 meter whip on his car and found it had a low swr on 2 meters. It even gave a beter signal from several repeaters than a 5/8 wave whip.

Chris wrote:
>
> I've recently gained my ham license. I have various wide-band scanner
> antennas from earlier scanning days. Apart from the SWR
> considerations, is there any danger to my new amateur radio equipment
> in using a scanner antenna for transmitting in the 2 metre and 70cm
> amateur bands?
>
> Chris L

137. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Rich Grise <richgrise@vel.net>
Message-ID: <3999DE58.538F@vel.net>
Source record: 182659
Cross-posted to: alt.engineering.electrical,alt.comp.hardware.homebuilt,rec.radio.amateur.antenna,sci.electronics.basics

Wow! Thanks! Although I'd never have guessed that concrete
has better conductivity than dirt. Although, given the
concomitant moisture, it's quite credible. I could get
into a lively discussion about the "Lightning is RF"
part, in that I'd say it's more like a spike, which has
harmonics all the way up the spectrum, but I don't want
to start a debate until I digest this new information.

Thanks!
Rich

> >OK, I give up. What's "Ufer grounding?"
>
> Second, the concrete, which is a better conductor than
> typical soil because of the ionic nature of the cement,
> forms a large sheet conductance bonded face to face
> to the large sheet conductance which is the Earth. In
> effect we have billions of resistors in parallel, which
> results in a very low total resistance to currents flowing
> to or from Earth.
>
> That's what makes a Ufer ground a preferred way to
> establish a connection to Earth.
>
> Gary

138. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3999E127.F64339DE@usa.alcatel.com>
Source record: 182660

FWIW, the December 1999 issue of the IEEE Antennas and Propagation
Society shows some folks in Japan patenting the pi-network. Patent number
5,874,926 is assigned to Murata Mfg, Co.

Cortland
(ka5s@saber.net)

Gerald Schmitt wrote:

> On Tue, 15 Aug 2000 09:12:30 -0500, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >Chip says it's out today- no statement of claims given.
> >
> > 6,104,349
> >
> >Bill-W4BSG
>
> It isn't on the patent office web site yet but they run a bit behind.
> The number is about right for the timing. I can't wait until it's
> posted. I've got the soldering iron all warmed up and traceable
> field strength measuring equipment ready.
>
> Hoo Boy we gonna find out if this hound can hunt. Modeling
> is all well and good but you know us experimentalists---

139. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3999E14F.1E9F8B79@usa.alcatel.com>
Source record: 182661

FWIW, the April 1999 (No, it's NOT an April fools issue) issue of the
IEEE Antennas and Propagation Society shows some folks in Japan patenting
the pi-network. Patent number 5,874,926 is assigned to Murata Mfg, Co.

Cortland
(ka5s@saber.net)

Gerald Schmitt wrote:

> On Tue, 15 Aug 2000 09:12:30 -0500, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >Chip says it's out today- no statement of claims given.
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> posted. I've got the soldering iron all warmed up and traceable
> field strength measuring equipment ready.
>
> Hoo Boy we gonna find out if this hound can hunt. Modeling
> is all well and good but you know us experimentalists---

140. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3999E24C.F736A5E9@hiwaay.net>
Source record: 182662

Let me answer for Roy, from outside the "provider" side of the house- I think EZNEC (Roy's own program) in its current, Windows, version is so user friendly it is like shaving your own face.

It is easy- and fast, and lets you cut and try until you are happy with the results.

My only problem with it is that I'm not enough of an antenna expert to really wring it out.

It's good.

Bill-W4BSG

sideband wrote:
>
> Roy Lewallen wrote:
>
> > EZNEC is an antenna analysis program. You describe to the program what
> > the antenna physically looks like, and it tells you the pattern,
> > impedance, currents, and derivative information (like front/back ratio,
> > SWR, etc.). You can get info about EZNEC, and download a free demo
> > program (fully functional except limited in antenna complexity) from
> > http://eznec.com.
> >
> > Roy Lewallen, W7EL
>
> Appreciate this info, Roy.
>
> I guess what this boils down to, and I should have posted it this way in the
> first place, is What would be the best and easiest way to model the dipole
> we've been discussing in the other thread (Homebrew Dipole)?
>
> Which program is more "user friendly" and will show me a radiation pattern
> based on a vertical dipole
>
> Thx, and 73.
>
> -SSB

141. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3999E416.6F3A8996@hiwaay.net>
Source record: 182663

Gerald- Unfortunately, until the patent is posted, we have absolutely NO idea what it covers- it could be the K2, the FQY, or a replacement for damaged butterfly feelers. Considering the timing (LONG gestation period for Patents) I doubt it is the K2 Flyer. In addition, the K2 is such a pitiful excuse for an antenna, I doubt even Chip would put out all those $$$ to patent it.

(Just guessing)

Bill-W4BSG

Gerald Schmitt wrote:
>
> On Tue, 15 Aug 2000 09:12:30 -0500, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >Chip says it's out today- no statement of claims given.
> >
> > 6,104,349
> >
> >Bill-W4BSG
>
> It isn't on the patent office web site yet but they run a bit behind.
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> posted. I've got the soldering iron all warmed up and traceable
> field strength measuring equipment ready.
>
> Hoo Boy we gonna find out if this hound can hunt. Modeling
> is all well and good but you know us experimentalists---

142. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <unpjpskgu43uhu2esjjcqon4cql20ilpnm@4ax.com>
Source record: 182664

On Tue, 15 Aug 2000 05:39:00 -0400, sideband <sideband@cac.net> wrote:

>I've seen numerous mentions of these programs (suites?) in posts here,
>and I'm curious... What are they? What do they do? Where can I download
>and/or purchase them?
>
>TIA
>
>-SSB

EZNEC is a Windows program which allows you to analyze antenna
performance under various conditions, and allows you to modify the
antenna itself to see the effect of the changes. Download a demo copy
from:

http://eznec.com/

73, Bill W7TI

143. Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Dan Yemiola <dyemiola@LexComInc.net>
Message-ID: <399A1607.5BE80D81@LexComInc.net>
Source record: 182665

I have to put my HF antenna in my attic under the roof. I have 32 feet
of free space.
I am thinking of using slinkies. I would like to get the antenna
resonant at 80m.

Questions:

1) Has any one built a 80m dipole from slinkies?

2) Or would an end fed wire be better?

3) How to feed Them?

4) Would end fed slinky allow the antenna to resonate on more than
band?

5) Does anybody have any experience they would be willing to share?

Dan Yemiola

AI8O@Qsl.net

144. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Rich Myer <n8fgb@bignet.net>
Message-ID: <spjr8vi0r5j50@corp.supernews.com>
Source record: 182666
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Cut it for the lowest band you want and feed with twin thru tuner,works
great that way.
Rich
N8FGB
<jason_hsu@my-deja.com> wrote in message news:8ncoci$58u$1@nnrp1.deja.com...
> How precisely cut must a wire antenna be? I have heard about 1/2
> wavelength wire antennas, but if the wire must be close to this length,
> then you can only use one band or are willing to have several different
> antennas. I know that tuners are intended to correct mismatches, but I
> have heard that performance does suffer if the mismatch to be corrected
> is high enough and that an even bigger mismatch can be too much for a
> tuner to handle.
>
> Can anyone shed some light on this? I'm confused.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/tech-dwdm.html
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

145. Re: Remember those GOTHAM verticals...???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3999ED67.613A0077@oio.net>
Source record: 182667

Joel,
The 'Gotham' verticals were one of the worst antennas ever
'thought'
of by man! Remember that you ~can~ make any length antenna work on
any
frequency, if you want to 'bad' enough. Probably won't work well, but
it ~can~ be done.
I think there was a total of 2 people who ever got a 'Gotham' to
work close to what you'd call 'well'. Neither followed the direction,
both did use a good ground system, and neither kept the antenna for
long.
(I'm sure you can guess that the above is 'tongue in cheek'.)
And, your correct about the 'too good to be true'... it was.
'Doc

146. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3999EEDF.98C3BCD9@oio.net>
Source record: 182668

Tom W8JI wrote:
>
> On Mon, 14 Aug 2000 14:36:10 -0500, 'Doc <w5lz@oio.net> wrote:
>
> > >
> > >
> > >Fractenna,
> > > I thought about making one. Does that mean your thinking
> > >about taking me to court?
> > > 'Doc (non Ph.D.)
>
> Be careful Doc, if you show any interest in him he might court you.
>
> 73 Tom

!!! What a revolting thought !!!
'Doc
PS - I may be easy, but I ain't cheap!

147. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39a38d01.31177741@news.seanet.com>
Source record: 182728

On Tue, 15 Aug 2000 00:05:31 GMT, "George , W5YR" <w5yr@att.net>
wrote:

>
>
>Richard Clark wrote:
>The pressure to maintain the original afloat has created a dynamic
>> tension with the desire to sink the replica. ^^^^^^^
> ^^^^^^^
>
>Richard, I had no idea that you were old enough to recall the famous
>trademarked concept behind Charles Atlas' famous body building course of
>the late 30's. He somehow stumbled upon what is know termed the
>isometric concept of exercise and branded it Dynamic Tension.
>
>I also suspect that, clever silver-tongued devil that you are, you
>deliberately planted this little phrase in order to see who was reading
>carefully (!).
>
>72/73, George W5YR - the Yellow Rose of Texas
>Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
>Amateur Radio W5YR, in the 54th year and it just keeps getting better!
>R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
>(12/99)

Hi George,

Did I kick some sand in anyone's face?

My era is more aligned to Jack LaLane.

If one were to extend Charles's metaphor, then the exercise we find
here in this topic is isophomoric (equally clumsy from any point of
view).

73's
Richard Clark, KB7QHC

148. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <3998F12D.A771FEE3@cac.net>
Source record: 182729
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Bill Nelson wrote:

> In rec.radio.cb WildBill <wildbill @hose.com> wrote:
> : sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
> : would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
> : be a 2:1 swr ... trim each end the same or add the same to each side to
> : get your swr down to which every frequency is of your interest..
>
> I have to disagree with this generalization. It is fine for any antenna that
> is close to 50 ohms impedance at resonance - but not a lot of help otherwise.
>
> For example, some antennas are actually close to 30 ohms at resonance. You
> will radiate more power if the antenna is tuned for a SWR of close to 2:1,
> NOT 1:1. The problem is figuring out if that impedance is around 30 ohms
> or around 100 ohms - using just a SWR meter.
>
> That is why it is recommended that the SWR meter is only used to make sure
> the impedance is within the range that the transmitter can handle. Tuning
> the antenna is done by field strength measurements - just tune for maximum
> radiated signal, and let the SWR become whatever it becomes. If it is out
> of the range that the transmitter can handle, then the antenna design needs
> modified in some way - then retune using the field strength meter.
>
> --
> Bill Nelson (billn@peak.org)

Bill:

Thanks for the input on this one, too... Another big question, though....

How could I test field strength without a field strength meter? I don't have access to one that's worth a darn. I suppose I could get one of the cheapies from RatShack, but I'd really like to do this right... Is there a way to test field strength without said meter?

I know its a strech, but, well, I'm of limited means, which is one of the reasons I'm building my own antenna, rather than buying one.

Thx, and 73

-SSB

149. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <3998F8CD.AF562F87@cac.net>
Source record: 182730

Fractenna wrote:

> Richard Clark of Woodinville Washington is in violation of copyright of
> material held by Fractal Antenna Systems, Inc. and is requested to remove his
> web page:
>
> http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
>
> Further, Richard Clark has not provided notice of pending patents with respect
> to the antenna by Fractal Antenna Systems, Inc., thus misleading the reader as
> to the nature of the circumstances under which it is available.
>
> In addition, Richard Clark has posted statements which make deliberate efforts
> to be injurious to Fractal Antenna Systems's technology and its benefits,
> misrepresenting the results of the antenna's performance.
>
> If Mr. Clark does not immediately remove said material from public access then
> Fractal Antenna Systems, Inc. will bring forth a lawsuit for copyright
> violations and other offenses.
>
> Nathan Cohen, Ph.D.
> Chairman and CTO
> Fractal Antenna Systems, Inc.

What an anal retentive sphincter.

Just my two cents.

-SSB

150. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <3999027B.7F27379F@cac.net>
Source record: 182731

Jim Hahn wrote:

> Please help! I live in an area in San Diego where we have extremely
> restrictive CC&R's. Am getting back into amateur radio after an absence
> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
> primarily interested in cw on 40 or 30 meters. I cannot place an
> antenna really higher than our fence outside our house which is about
> 8-10 in height. Will not be running greater than 90 watts which is the
> most that the DX-60 will put out. Suggestions for an antenna for this
> setup? I would love to just put up a dipole but will not be possible
> because of neighbors. Also would love to put up the RG-8 by Cushcraft
> but would have the same problem at 26'. Have looked at: MFJ loop
> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
> but have been told unless you have the bilal up high it would be a waste
> of time. Thanks for any input anyone can give me! Jim in San Diego

Why not just staple a dipole to the peak of the roof, or go with an inverted "V" down one side of the slope of the roof? Using the aforementioned electric fence wire, it should be near invisible up there, and drilling a hole in one of the sewer drain breathers, you could pass your feedline thru that to the roof, making it almost undetectable as well. Of course, you'd have to wetherseal it back up once the feedline was in place, but it should work. Of course, I don't know the details of the design of the antennas, but I've heard of people doing this, and having it work nicely.

HTH.

-SSB

151. Re: Strange Signal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399903E5.DAE95098@cac.net>
Source record: 182732

mensaboy wrote:

> Mystery solved! This interference was traced by listening on HF
> whilst opening various circuit breakers in the house.
> Finally the living room area was isolated. At first I thought my
> refrig was at fault, but further opening of circuits isolated the
> problem to the TV and Stereo cabinet.
>
> Apparently remote TVs using IR remotes put out a low frequency
> interefernce. I'm using an RCA set some four years old.
> By unplugging the TV all was well. I watch very little TV anyway
> so now the added chore of pugging the boob tube in may drop my
> watching to zero.
> If anyone else has similar problems and has a TV remote on,
> unplug the set to see if this drops the interference.
>
> ----------
>
> Got questions? Get answers over the phone at Keen.com.
> Up to 100 minutes free!
> http://www.keen.com

I have a similar problem with a computer monitor, at least until it goes
into powersave mode, resonant at 27.385 or thereabouts. I simply set
Windows to turn off the monitor quicker, and blammo, problem solved...

It might have something to do with the flyback?

-SSB

152. Re: K2 FRACTAL FLYER: **New Antenna** LINK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39990753.EA91686E@cac.net>
Source record: 182733

sideband@mindspring.com wrote:

> Fractenna wrote:
>
> > Received a complaint this morning about web site access.
> >
> > I don't know if the problem was anecdotal or real, but was probably
> > short-lived. There have been about 500 hits to the K2 page in the last day, and
> > about 320 to the main page since the K2 went on the site. This is heavy
> > traffic for a weekend-day .
> >
> > Apparently some are book marking and going back to it.
> >
> > Here's the direct URL if that helps:
> >
> > http://www.fractenna.com/ham/hampage6.html
> >
> > 73,
> > Chip N1IR
>
> You have really bad service if you get complaints about 500 hits. I used to get
> that many a day to my reptiles page when it was up and running on geocities. What
> is your isp using? A pots line?

Hrm... interesting... I get over that on the webserver I keep here at the house, over an ISDN line, and I can still play CyberStrike or Q3A without slowdown.... ::shrug::

Seems to me if you really wanted to keep track of each individual's visit to the site, you'd put the site in a frames setup, and set the counter in one of the frames, a menu in another frame, and load the pages into a third... something like the site at http://phoenixrising.cac.net/~sideband

::shrug::

Just my two cents.

-SSB

153. EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39990FB4.D06CB087@cac.net>
Source record: 182734

I've seen numerous mentions of these programs (suites?) in posts here,
and I'm curious... What are they? What do they do? Where can I download
and/or purchase them?

TIA

-SSB

154. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815053720.05108.00000246@ng-da1.aol.com>
Source record: 182735

> Fractenna wrote:
>:
>: >hi, I built a fractal antenna from reading the patent
>: >files on ibm patent website.
>: >I guess I will be in court someday.
>: >
>: >I will post my findings on my website as soon as
>: >I am able to start it up.
>: >
>: >jumbo
>: >
>:
>: You will if you try to sell it or be involved in any commercial aspect.
>
>Wrong, as has been repeatedly pointed out to your.
>
>First, you do not have a patent, so you do not have patent protection.
>Until you get that patent, anyone can use the information you supply to
>manufacture and sell devices based on your design.
>
>If the antenna is built using information that is based on other patents
>in existance, then you would have to prove that your patent variation is
>not derivitive.
>
>By publishing at least a variation of your design, you have just thrown
>away most of the enforceability of any patent you may receive. Such "trade
>secrets" are not called that just to be using large words. If intellectual
>property is willing divulged by someone having the right to do so, then it
>no longer is intellectual property.
>
>--
>Bill Nelson (billn@peak.org)
>

My statement is accurate. I regret that you do not understand the notion of
'tense'.

73
Chip N1IR

155. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815053827.05108.00000247@ng-da1.aol.com>
Source record: 182736

>On 15 Aug 2000 04:11:05 GMT, Bill Nelson <billn@spock.peak.org> wrote:
>
>>By publishing at least a variation of your design, you have just thrown
>>away most of the enforceability of any patent you may receive. Such "trade
>>secrets" are not called that just to be using large words. If intellectual
>>property is willing divulged by someone having the right to do so, then it
>>no longer is intellectual property.
>
>Not true at all. The patent itself discloses the design. In the USA,
>one may publically disclose (or offer for sale) one's invention prior
>to patent award without loss of patent protection provided that such
>disclosure occurs not more than 1 year prior to the filing date of the
>patent application. As far as I can see, Skip has not lost any IPR
>because of anything he's posted here. But I don't know his filing
>date nor have I researched his posting history.
>
>Klein, WT6G
>Not a patent attorney. Your mileage may vary.
>

I would be much obliged if you got my name right. There is no 'Skip'.

Best,
Chip N1IR

156. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815054245.05108.00000248@ng-da1.aol.com>
Source record: 182737

>Did I get that right? If so, what am I missing? Why would
>anyone want such an antenna? Is it just the fact that it
>occupies a small space? I've been trying to figure out what
>benfits, if any, can be realized with a fractal design. Chip
>has been completely useless in helping me in this

I think Ed had an excellent point: tell him what you think is better for DX at this height.

The K2 doesn't not "hear worse" than a dipole; is close or equivalent to a 1/4 wave monopole; and beats a 1/.8 wave for DX.

Why do you guys want to deliberately mislead people?

What's wrong with you Dave?

73
Chip N1IR

157. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815054440.05108.00000249@ng-da1.aol.com>
Source record: 182738

Ed--

Thanks for looking at the web page.

You will not get an answer because there is no solution. I'm sure that some imps will attack you personally but have no answer to the question.

73
Chip N1IR

158. Re: Fractal and novel printed antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399910C8.2094AF68@mindspring.com>
Source record: 182739

Whatever the performance of fractally loaded antennas, I think they are possibly mis-named. The Mandelbrot set seals in permutations of integers, where the fractall antennas I have seen deal in fractions. Perhaps they should be called fractional antennas.

de Will KD7BFX

Chuck O'Neal wrote:
>
> As I thought over the two years I've been following this
> "thread", Fracky is a copy cat...indicated by the fact that
> he never could explain a "fractal", or explain the basis of
> a fractal antenna's operation. I built one two years ago
> and found that there is NO advantage to it's performance
> over other loaded designs of equivalent size.
> Basic fact: (or fundamental engineering axiom) There is no free
> lunch, or "you don't get something for nothing". The "piecewise"
> linear loading of the fractal element provides interesting higher
> order resonances but NOT "broadbanded" performance. Nor is
> a LPDA a fractal, unless a dipole is a fractal!!! So Fracky...
> the world isn't your fractal fantasy....only in your wildest (wet)
> dreams...
> Sleep tight...
>
> (W.G.Ewald) wrote in message ...
> >http://eleceng.ukc.ac.uk/research/comms/antennas/fractal.html

159. Re: "Flingshot" Antenna Tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399911D1.1F45D554@mindspring.com>
Source record: 182740

I made one for all of $5. If I bought a new wrist rocket, it would have been $12. 1) wrist rocket plus 1) thrift store spinning reel ($3) plus 250' of monofilament line. Presto!

de Will KD7BFX

Jerry Oxendine wrote:
>
> These things are showing up at hamfests for up to $50.00. You can
> make one for yourself for less than $20.
>
> Jerry
> K4KWH

160. Re: Fractal and novel printed antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815055136.06806.00000699@ng-da1.aol.com>
Source record: 182741

>Whatever the performance of fractally loaded antennas, I think they are
>possibly mis-named. The Mandelbrot set seals in permutations of
>integers, where the fractall antennas I have seen deal in fractions.
>Perhaps they should be called fractional antennas.
>
>de Will KD7BFX
>

I respect your opinion but I, and others, are using the conventional
definitions. The K2 Fractal Flyer

(see http://www.fractenna.com/ham/hampage6.html)

Is an excellent case in point. Both fractals used are simple and well-known.

73
Chip N1IR

161. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815055259.06806.00000700@ng-da1.aol.com>
Source record: 182742

>Jim Hahn wrote:
>
>> Please help! I live in an area in San Diego where we have extremely
>> restrictive CC&R's. Am getting back into amateur radio after an absence
>> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
>> primarily interested in cw on 40 or 30 meters. I cannot place an
>> antenna really higher than our fence outside our house which is about
>> 8-10 in height. Will not be running greater than 90 watts which is the
>> most that the DX-60 will put out. Suggestions for an antenna for this
>> setup? I would love to just put up a dipole but will not be possible
>> because of neighbors. Also would love to put up the RG-8 by Cushcraft
>> but would have the same problem at 26'. Have looked at: MFJ loop
>> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
>> but have been told unless you have the bilal up high it would be a waste
>> of time. Thanks for any input anyone can give me! Jim in San Diego
>
>Why not just staple a dipole to the peak of the roof, or go with an inverted
>"V" down one side of the slope of the roof? Using the aforementioned
>electric fence wire, it should be near invisible up there, and drilling a
>hole in one of the sewer drain breathers, you could pass your feedline thru
>that to the roof, making it almost undetectable as well. Of course, you'd
>have to wetherseal it back up once the feedline was in place, but it should
>work. Of course, I don't know the details of the design of the antennas, but
>I've heard of people doing this, and having it work nicely.
>
>HTH.
>
>-SSB

The K2 Fractal Flyer still looks like your best option. A low dipole will not help.

73,
Chip N1IR

162. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <3999140A.FC7AFCCF@mindspring.com>
Source record: 182743

that's the only good reason I can think of. . . .

de Will KD7BFx

163. Re: HELP! No stealth antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39991527.D8DCDA0E@mindspring.com>
Source record: 182744
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Run the wire from the "unreachable area" to the side of your building at an upper floor, then down to your apartment window and through. This will work great, provided you can gain access tot he roof or uppe rfloor.

de Will KD7BFX

jason_hsu@my-deja.com wrote:
>
> I live on the ground floor. Outside my apartment lies a 10-20 foot
> stretch of grassy open space where anyone can walk by (well, at least
> it faces away from the parking lot and towards an unreachable area of
> steeply downsloping woods). Between my apartment and the unreachable
> area, there are NO bushes, shrubs, railings, trees, or other large
> objects I can use to conceal wires or other objects. I'm sure that
> even a well-camouflaged wire would be discovered sooner or later. At
> least someone on a higher floor can better conceal things.
>
> Can I still operate HF stealth with an outdoor antenna? Could a wire
> antenna work?
>
> Or would I be better off using a mobile antenna (like a Bugcatcher)
> outside and bringing it inside when I am not operating? Since I only
> plan to operate a few hours per week, few people would notice.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu AT apexmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

164. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39991627.644DF523@mindspring.com>
Source record: 182745
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

There will be absolutely no difference in radiating efficiency whether
the same antenna is fed with 1500 watts, or 100 milliwatts.

de Will KD7BFX

sideband wrote:
>
> "Michael J.Talkington" wrote:
>
> > also with 12 gauge I have run 1500 watts pep into it!
> >
>
> I guess the question here would be, did the antenna radiate as efficiently at 1500
> watts as it did at, say, 10 watts? Or doesn't the guage of the antenna wire matter
> in reference to the power output the antenna is expected to radiate?
>
> -SSB

165. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: al <ke4nu@hotmail.com>
Message-ID: <GQ8m5.481$M%6.1991@newsfeed.slurp.net>
Source record: 182746

Thanks, I emailed Tom last night and he got right back to me. I was thinkin radioworks had a balun that would cover six also. Did yours check out low on several bands...mind did...Tom said some them were shipped that way but now they're higher in resonance...Can';t wait to get it up hi in the air...tnx Alan

166. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3%8m5.486$M%6.82@newsfeed.slurp.net>
Source record: 182747

That was I as stuntman pulling that RR-car down the track. It took me 2 miles of pulling for them to get enough film footage ...

My Charles Atlas can whip your Jack LaLane any day!

K3BHJ

167. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399927E0.552D7F48@cac.net>
Source record: 182748

Fractenna wrote:

> >Jim Hahn wrote:
> >
> >> Please help! I live in an area in San Diego where we have extremely
> >> restrictive CC&R's. Am getting back into amateur radio after an absence
> >> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
> >> primarily interested in cw on 40 or 30 meters. I cannot place an
> >> antenna really higher than our fence outside our house which is about
> >> 8-10 in height. Will not be running greater than 90 watts which is the
> >> most that the DX-60 will put out. Suggestions for an antenna for this
> >> setup? I would love to just put up a dipole but will not be possible
> >> because of neighbors. Also would love to put up the RG-8 by Cushcraft
> >> but would have the same problem at 26'. Have looked at: MFJ loop
> >> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
> >> but have been told unless you have the bilal up high it would be a waste
> >> of time. Thanks for any input anyone can give me! Jim in San Diego
> >
> >Why not just staple a dipole to the peak of the roof, or go with an inverted
> >"V" down one side of the slope of the roof? Using the aforementioned
> >electric fence wire, it should be near invisible up there, and drilling a
> >hole in one of the sewer drain breathers, you could pass your feedline thru
> >that to the roof, making it almost undetectable as well. Of course, you'd
> >have to wetherseal it back up once the feedline was in place, but it should
> >work. Of course, I don't know the details of the design of the antennas, but
> >I've heard of people doing this, and having it work nicely.
> >
> >HTH.
> >
> >-SSB
>
> The K2 Fractal Flyer still looks like your best option. A low dipole will not
> help.
>
> 73,
> Chip N1IR

Oh, give it a rest... I've been on this NG one day, and I'm already sick of you,
Chip...

Just a CB'ers two cents.

-SSB

168. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: WildBill <wildbill@hosel.com>
Message-ID: <0_9m5.6081$X66.147542@typhoon1.ba-dsg.net>
Source record: 182749
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

I have to disagree with your generilization a well
"Bill Nelson" <billn@spock.peak.org> wrote in message > I have to disagree with this generalization. It is fine for any antenna that
> is close to 50 ohms impedance at resonance - but not a lot of help otherwise
==========
So your saying that tuning an antenna with a swr meter is wrong ..max field strength does not guarantee lowest swr .. how can you go wrong by tuningan antenna for lowest swr

> For example, some antennas are actually close to 30 ohms at resonance. You
> will radiate more power if the antenna is tuned for a SWR of close to 2:1,
> NOT 1:1. The problem is figuring out if that impedance is around 30 ohms
> or around 100 ohms - using just a SWR meter.

>
> That is why it is recommended that the SWR meter is only used to make sure
> the impedance is within the range that the transmitter can handle. Tuning
> the antenna is done by field strength measurements - just tune for maximum
> radiated signal, and let the SWR become whatever it becomes. If

169. Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815074414.11447.00000207@ng-mf1.aol.com>
Source record: 182750

Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have a post from a newcomer asking 'what's better'?

Why do we not have an answer for this?

Could it be that, for those who must deal with low heights, a directional antenna with equivalent, or nearly equivalent field strength at low (DX) angles to a 1/4 wave monopole--virtually twice as high--is NOT advantageous?

Or are those who want to hoodwink fellow hams that a new technology is a useless one-- do they want to keep other IGNORANT?

Go try it yourself, over real ground:

Model an /18 wave monopole, with, say, 8-10 radials;
Model a low dipole up 1/8 wave;
Model a sloping dipole up 1/8 wave;
Model a horizontal loop up 1/8 wave;
Model a mobile whip with radials;
Model any other antenna in a small footprint and low height.

Model these over poor to good ground and look at the field strength at low angles, say 5-15 degrees.

Then decide what's a "dummy load" and what's "deaf".

The K2 Fractal Flyer was designed because people ASKED for it. They wanted a low height antenna, with no pretensions that it would work like a Yagi up 100 feet--BUT they wanted something that would be directional and work DX well.

So, go ahead: give us that ideal solution for an antenna restricted to 1/8 wave height. Then tell how the K2 Fractal Flyer compares.

73,
Chip N1IR

170. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <B5am5.6858$pu4.553955@typhoon.ne.mediaone.net>
Source record: 182751

Now we add talking to yourselves....
I wonder which entity will answer next...
whose turn is it?

171. Re: Tower spacing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: dmartin560@aol.com
Message-ID: <20000815080804.02033.00001142@ng-ck1.aol.com>
Source record: 182752

Hi Rick,
Are you familiar with the Tower Talk reflector? Lots of good info there on towers and antennas. The list is moderated so there is no BS.

FAQ's are at...www.contesting.com/FAQ/towertalk.

Post your question there and you will get plenty of help.

73
Dwayne KG4ADM

>I am in the enviable position of being able to erect multiple towers on my
>in-city lot...so I am putting up tower number two which will be for the
>uhf/vhf array. The first tower is a 65 foot rohn 25 with a triband hf yagi
>and above that a 6 meter yagi.
>
>The second tower is also a rohn 25 (50 foot) that will house 2M, 220, 440,
>and 1.2g yagis. I only use one band at a time, and I don't run over 100
>watts. I am concerned about pattern distortion.
>
>How far apart should they be spaced? I'm looking for a minimum here and I
>will work out from there. It is looking like I will be able to space them
>about 30 feet without doing anything too complex. Further apart gets
>complicated.
>
>Thanks for the help!
>
>Please respond to rickmudd@home.com.
>
>Rick
>kc7wgs
>

172. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399931bf.8620062@news.akorn.net>
Source record: 182753

On Mon, 14 Aug 2000 22:07:04 GMT, tom_bruhns@agilent.com wrote:

>OK...the discussions I've seen here (and been a part of) have offered
>various explanations about what's going on, or what people think is
>going on. (Or what people know MUST be going on! :-) How about some
>_measurements_? HOW do you know that the quarter wave stub worked? HOW
>does W8JI know that a coil with a perpendiular quarter wave wire
>attached to its center tap works, but that the same antenna minus the
>quarter wave wire does not give the desired collinear results?

Because I built one, about 25 years ago.

It was part of a phase I went through, when I was trying to use the
300 feet of space between a couple big Cottonwood trees over a clear
field for 40 meter and 80 meter systems.

73 Tom

173. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815082558.19719.00000054@ng-da1.aol.com>
Source record: 182754

Here's some useful info. Modeled with good ground, 1/8 wave up:

Antenna F.S. at 10 degrees el

K2 FracFlyer -4 dBi
W8JK -4.7 dBi
Dipole -6.4 dBi
Hor.Loop -9.3 dBi

Are we to conclude that all antennas are 'deaf'?

73
Chip N1IR

174. THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000815083435.10494.00001141@ng-da1.aol.com>
Source record: 182755

On the day of issuance of my first antenna patent, I want to pay a special tribute to Chuck, K1KW.

Chuck used to be WA1EKV. As a SWL, at summer camp in 1966, I spent hours listening to Chuck on the Hallicrafters (later Hammurlund) receiver, along with other stations. Occasionally I would even hear DX, such as Siberia. But every day, during science session, I would fire up the golden tubes of the Hallicrafters and almost always found Chcuk on, saying something interesting. That Fall I got my ticket and became WN1HBX.

Wow! I was hooked.

Anyway, Chuck knows how his on the air activities contrributed to my inchoate interest in radio and telecom, and this seemed a good time just to publicly thank him for the inspiration. Where that path has taken me has not always been sure or successful, but it certainly has been fun, exciting, and educational.

So, thanks Chuck! I hope you remain an inspiration to me and others for many years!

73,
Chip N1IR

175. Stealth Aerials & Flingshots

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <j%am5.516$M%6.2290@newsfeed.slurp.net>
Source record: 182756

Wound about 200 yards of wirewrap wire on my homebru version flingshot's reel. Seemed about the same weight as the 10-lb nylon line it replaced.

2-oz weight used; first try, put about 100 yds of wire atop a line of trees. Put another hundred in the opposite direction. Now have a 200-yd dipole facing N/S. Wonder how long it'll last in the .-- -..- ..--..

It certainly can't be seen easily, even though I used bright orange wire!

CU on 40CW

73, Dave, K3BHJ

176. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <oT+ZOfKI0iZns6pyOkbpLoe0npis@4ax.com>
Source record: 182757

Chris <chrisml@clearnet.co.nz> wrote:

>I've recently gained my ham license. I have various wide-band scanner
>antennas from earlier scanning days. Apart from the SWR
>considerations, is there any danger to my new amateur radio equipment
>in using a scanner antenna for transmitting in the 2 metre and 70cm
>amateur bands?
>
>Chris L

No more so than if you simply took any odd length of wire, hung it off
your antenna terminal, and started transmitting :-)

Bob
k5qwg

177. Re: k2 fractal flyer review: What's wrong ...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <x7bm5.523$M%6.2292@newsfeed.slurp.net>
Source record: 182758

"What's wrong with you Dave?

73
Chip N1IR" wrote in part.

****

Shouldering the risk of not being the referent, this 'Dave' replies,
''Nothing that a winning LOTTO ticket wouldn't ameliorate''.

So, Chip, what's wrong with you?

K3BHJ

178. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <60KZOZXZemzedhEtyakguqHL2hQQ@4ax.com>
Source record: 182759

sideband <sideband@cac.net> wrote:

>Bill Nelson wrote:
>
>> In rec.radio.cb WildBill <wildbill @hose.com> wrote:
>> : sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
>> : would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
>> : be a 2:1 swr ... trim each end the same or add the same to each side to
>> : get your swr down to which every frequency is of your interest..
>>
>> I have to disagree with this generalization. It is fine for any antenna that
>> is close to 50 ohms impedance at resonance - but not a lot of help otherwise.
>>
>> For example, some antennas are actually close to 30 ohms at resonance. You
>> will radiate more power if the antenna is tuned for a SWR of close to 2:1,
>> NOT 1:1. The problem is figuring out if that impedance is around 30 ohms
>> or around 100 ohms - using just a SWR meter.
>>
>> That is why it is recommended that the SWR meter is only used to make sure
>> the impedance is within the range that the transmitter can handle. Tuning
>> the antenna is done by field strength measurements - just tune for maximum
>> radiated signal, and let the SWR become whatever it becomes. If it is out
>> of the range that the transmitter can handle, then the antenna design needs
>> modified in some way - then retune using the field strength meter.
>>
>> --
>> Bill Nelson (billn@peak.org)
>
>Bill:
>
>Thanks for the input on this one, too... Another big question, though....
>
>How could I test field strength without a field strength meter? I don't have
>access to one that's worth a darn. I suppose I could get one of the cheapies from
>RatShack, but I'd really like to do this right... Is there a way to test field
>strength without said meter?

You might try coupling a low-wattage light bulb to your antenna, and
then tune for maximum brightness. When I was a kid, I used to tune up
my transmitter by just connecting a light bulb across the antenna
terminals.

Bob
k5qwg
>

>I know its a strech, but, well, I'm of limited means, which is one of the reasons
>I'm building my own antenna, rather than buying one.
>
>Thx, and 73
>
>-SSB
>

179. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399947f4.14305602@news.akorn.net>
Source record: 182760

On Tue, 15 Aug 2000 04:23:34 GMT, ehsjr@bellatlantic.net wrote:

>
>Chip, what is WRONG with you?

Nothing. He is a perfect horse's ass. Ask anyone.

180. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399948f2.14559473@news.akorn.net>
Source record: 182761

On 15 Aug 2000 09:44:40 GMT, fractenna@aol.com (Fractenna) wrote:

>Ed--
>
>Thanks for looking at the web page.
>
>You will not get an answer because there is no solution. I'm sure that some
>imps will attack you personally but have no answer to the question.
>
>73
>Chip N1IR

"Ed",

I did a search of Dejanews. Thank's Rick for pointing that out!

It's interesting that you have never posted anything to any newsgroup
or public forum ever before in your "life" and suddenly appear here to
defend Chip from an AOL account.

Nice try Chip, but you've worn that ruse out.

73 Tom

181. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Cap'n Crunch <kcfamily@tir.com>
Message-ID: <Y4cm5.16618$iR3.708778@news-east.usenetserver.com>
Source record: 182762
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

"Brad" <ka8tok@four-way.net> wrote in message ...

<sideband said>
> > ...I'm thinking about building a wire type dipole in the apartment,
which
> >should have its center resonance somewhere close to 27.385, but I have a
> >few questions first, before I invest any time in it.
> >
> >1. Is it illegal for a CB'er (I'm not a HAM...yet) to build his own
> >antenna?
>
> No, it is not illegal to build your own

.....True enough.....

> >2. Suppose I want the dipole to be able to handle up to 200 watts (I'm
> >giving myself some serious room here, overbuilding if you will)? What
> >guage wire should I use to make the transmitting and "ground" elements?
>
> at least 2 gauge cable min.

.....I hope you mean #12 wire (AWG)... even that would be excessive at
only 200 watts... #18-20 AWG would suffice, but may not survive a severe
windstorm.

<sideband asked>
> >4. If I build it, for example, 1/4 wave each side, is that a 1/2 wave
> >dipole, or a 1/4 wave dipole?

<Brad replied >
> this would be a half wave dipole which has more gain the 1/4 wave dipole
> does

.....a 1/2 wave dipole is considered to be 'unity' gain... ZERO gain. It
is the standard against which most other antennas are compared for purposes
of measuring gain. A 1/4 wave dipole?.... now THAT would present an
interesting feedpoint impedance to match!

182. help uit regio antwerpen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: roger staut <roger.staut@euronet.be>
Message-ID: <8nbjh6$251p$1@buty.wanadoo.nl>
Source record: 182763

hulp
ik heb een motor met positioner en mijn schotel geplaatst maar kan mij
iemandt vertellen
hoe ge deze op de juiste plaats kan brengen
uit welke richting moet vertrekken
wat is de satelitte die ik eerst moet juist zetten
graag e-mail

roger.staut@euronet.be

groetjes roger

183. Re: K2 FRACTAL FLYER PERFORMANCE: Perfect

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <tncm5.566$M%6.2566@newsfeed.slurp.net>
Source record: 182764

C'mon! Nobody and nothing's perfect.

K3BHJ

184. patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39994FCE.82B303A3@hiwaay.net>
Source record: 182765

Chip says it's out today- no statement of claims given.

6,104,349

Bill-W4BSG

185. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29775-399951E9-17@storefull-118.iap.bryant.webtv.net>
Source record: 182766

Bart, WB6HQK wrote:

"The trick is that the stub is perpendicular to the primary radiating elements and is resonant for the common mode."

That makes the series current path through the 1/4-wave stub 1/2-wave long. This stub then produces 180 degrees of delay to add to the 180 degrees of delay in a 1/2-wave dipole. 360-degree phase rotation puts the starts of current in the antenna elements in phase.

A quarter-wave stub and a 1/2-wave antenna element in series produce the same phase rotation as two 1/2-wave antenna elements. The difference is that the stub does not radiate.

The stub wires are folded into a parallel transmission line configuration. The distance between the wires is a small portion of a wavelength. So, since the current is balanced in the wires, a distant point will receive balanced opposing signals, or in other words, the 1/4-wave stub does not radiate.

So, we can have a 1/2-wave dipole connected at its extreme ends to additional 1/2-wave elements through 1/4-wave stubs to produce (3) 1/2-wave elements in the same alignment, and with the current flowing in the same direction in all elements.

Best regards, Richard Harrison, KB5WZI

186. Re: KMA Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39995AD3.981E98AF@tpi.net>
Source record: 182767

Tim,
I don't have any comparative results but can state that the 6M antenna is easy to assemble, is well designed, and works well.I talked to another ham on Saturday who also has one and he said he had just worked many stations in the midwest, Canada and Mexico from here in Northern California.

The SWR is good across the band.

If you are interested in a 2M LP, I make LPs for 2M, 220 and 440 bands
The 2m and 220 are 5 El, 24 inch boom, where the 440 is 7 el, 21 1/2 inch boom. If you are interested, e-mail a reply and I'll send directivity plots, SWR
and more.

Best wishes de ray, w6fya

tje@usol.com wrote:

> Anyone have any experience with KMA log periodic antenna's on 6 and/or 2
> meters ? Wonder how they work compared to a Cushcraft Yagi or similar.
> Any info appreciated.
> --
> Tim, K8TJ
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

187. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39995E99.847C99F8@wb6hqk.ampr.org>
Source record: 182768

Fractenna wrote:
>
> Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have a
> post from a newcomer asking 'what's better'?

It's interest to note the newcomer has apparently never posted to Usenet
before and coincidentally, posted from one of the same servers you
usually post from.

> Why do we not have an answer for this?

> Could it be that, for those who must deal with low heights, a directional
> antenna with equivalent, or nearly equivalent field strength at low (DX) angles
> to a 1/4 wave monopole--virtually twice as high--is NOT advantageous?

> Or are those who want to hoodwink fellow hams that a new technology is a
> useless one-- do they want to keep other IGNORANT?

What new technology? It sounds like you are claiming the K2 Fractal
Flyer, whatever that is, outperforms more conventional antenna systems
meeting the same constraints.

If you really want to challenge the rraa community, you might want to
state both the objective function (Figure of Merit) and the
constraints. The definitions should be formal enough so that anyone
skilled in the art can objectively and unambiguously apply the
definitions to any candidate antenna system.

> Go try it yourself, over real ground:
>
> Model an /18 wave monopole, with, say, 8-10 radials;
> Model a low dipole up 1/8 wave;
> Model a sloping dipole up 1/8 wave;
> Model a horizontal loop up 1/8 wave;
> Model a mobile whip with radials;
> Model any other antenna in a small footprint and low height.

Looks like the primary constraint is that the antenna will be sited over
a 'real ground' and must be fully enclosed in a box 1/8 wl high X 1/2 wl
long X 1/4 wl deep.

Am I correct?

Good engineering practice would be to softly constrain the system to be
'easy' to construct and maintain; structural simplicity and
straightforward tuneup is a necessity for many radio amateurs. I assume
the system should maintain the desirable (objective) properties over

typical environmental variations such as rain, ice, wind and snow.

> Model these over poor to good ground and look at the field strength at low
> angles, say 5-15 degrees.

I take it that the objective is to generate as much radiation at takeoff angles in the range 5 to 15 degrees. To what extent, if any, is directivity desirable?

bart
wb6hqk

188. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:05:31 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <399888CE.D08E2D92@att.net>
Source record: 182706

Richard Clark wrote:
The pressure to maintain the original afloat has created a dynamic
> tension with the desire to sink the replica. ^^^^^^^
^^^^^^^

Richard, I had no idea that you were old enough to recall the famous trademarked concept behind Charles Atlas' famous body building course of the late 30's. He somehow stumbled upon what is know termed the isometric concept of exercise and branded it Dynamic Tension.

I also suspect that, clever silver-tongued devil that you are, you deliberately planted this little phrase in order to see who was reading carefully (!).

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

189. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:08:26 UTC
From: rwclark@seanet.com
Message-ID: <39a27cf1.27065137@news.seanet.com>
Source record: 182707

On Mon, 14 Aug 2000 22:55:19 GMT, "Larry Naumann" <n0sa@earthlink.net>
wrote:

>I just downloaded Richards Eznec file and ran it on my computer. I had just
>started to build the K2, believing Chip's site and info presented there. On
>seeing the Eznec file, I will use the wire for something else. I am no
>expert but I can see that better and simpler designs are easily possible. I
>like to build and experiment with antennas and I am amazed at the amount of
>anecdotal evidence that is presented to hams by hams. I run mainly QRP and
>always try to get the most efficient design I can. I use Eznec and TLA to
>optimize my antenna designs and feed methods. It always amazes me at the
>number of hams who are running 100 watts out but loose much of that power in
>they're feedlines and matching networks. They are actually running QRP and
>just don't know it!! It seems to me, and this is only my opinion but Chip
>seems to be in this catagory of anecdotal evidence and half truths. I guess
>I will be the next one to be sued. But we in the ham community need to
>produce better information and stay away from the "it worked great for me "
>syndrome.
> Larry Naumann N0SA
>

Hi Larry,

There is no doubt the design may be improved, but at what cost?

This is something I try to point out at my page
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
wherein I caution the constructor not to use "improved ground."

All improvements will eventually lead away from the desired (?) front
to back performance as well as the wide match. Thus, for this design,
the issue of improvement is a loaded pistol pointed at the head. Do
you really want to improve the trigger sensitivity?

On the other hand, QRP operators seem the least likely to use this
design for every reason you list above. But back to improvement (and
damned the cost!).

First, what about the design is appealing that you would want to keep
it - and optimize it? What about the design is appealing that would
remain so if optimized? This last is a tough question, because it is
like choosing the fastest horse and then hobbling it for training and
putting a 300# jockey on its back for the triple crown. Still a nice
horse, but no longer a runner in the race.

I would like to point out that all information revealed about the
original design is accurate, all the information revealed about the

replica is also accurate (or as accurate as that found for the original). The difference is there is more information to be had about the original design that gives a fuller picture of its inadequacies that have been downplayed or omitted altogether. That "more" information is found at my page (and I'm sure there is even "more" than that).

This antenna is very tightly bound to ground to give its claimed specification. This is not what I would call a suitable QRP characteristic, but then there is a market for air-cooled resistors (directional or otherwise). True, a considerable amount of signal is pumped right into the ground (by design); but then it does achieve a decent match and a decent F/B for that penalty. However, it would probably serve better as a receiving antenna in that regard (where gain is cheap and doesn't take Watts to achieve). This is probably cold comfort tho' because the user would then need a radiating source and hence another antenna. I doubt a two antenna solution is a useful solution for QRP.

Stick with first principles. Build a good ground system if your preference is vertical, and then look at the variety of designs at my page:
http://www.qsl.net/~kb7qhc/
The extent of data may make selection difficult, but you will at least have a survey of a wide variety of fractal designs, plus discussion that also allows you to scale to your own form (if you think you've got the killer fractal that has yet to be put into wire form). Let me point out that even with a killer fractal, you are extremely unlikely to hear the difference over a simple well implemented vertical it is supposed to replace.

The best you can expect is from a quarter wave physical sized fractal of high dimension. The worst you can expect is to have to erect it (what can I say but sorry?). If you are a real glutton for punishment, then build a very big fractal and enjoy wide open matching over considerable tuning ranges. Be forewarned that the extremely wild turns and twists lead to some very non-intuitive lobes developed. They may have lotsa gain, but that gain may be in the direction of alpha centauri.

I hope this doesn't scare you away, the only suits that will be won over fractals are the suits to recover for the abuse of one's sanity. If you make any attempt to erect one of these, then you have already lost your case in that you have failed to demonstrate you had any sanity in the first place. This is from one who knows, a fractal fool.

73's
Richard Clark, KB7QHC

190. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:09:04 UTC
From: fractenna@aol.com
Message-ID: <20000814200904.12818.00000007@ng-fm1.aol.com>
Source record: 182708

Hi--

A 30M version of the K2 Fractal Flyer would do nicely.

Measurements of the design confirm its near unity gain with a 1/4 wave monopole at low angles (* this is an actual range measurement*), and modeling reveals that it has over 2 dB gain over a low dipole at low (DX) angles. In addition, it is superior to the low dipole in cutting down interference from local stations from skywave, as it has lower gain at high angles compared to the dipole.

You can see the K2 Fractal Flyer on:

http://www.fractenna.com/ham/hampage6.html

In addition, there is an ongoing discussion of the design on the fractal antenna reflector, joined by sending:

fractalantenna-subscribe@egroups.com

73
Chip N1IR

191. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 00:36:51 UTC
From: 2w8ji@contesting.com
Message-ID: <39988f8d.78022813@news.akorn.net>
Source record: 182709

On 15 Aug 2000 00:09:04 GMT, fractenna@aol.com (Fractenna) wrote:

>In addition, there is an ongoing discussion of the design on the fractal
>antenna reflector, joined by sending:
>
>fractalantenna-subscribe@egroups.com
>
>73
>Chip N1IR

Any information on that list is filtered by Chip, and so will not be
unbiased.

There is also a discussion on this group, that isn't edited. Richard
Clark has some accurate information, as a disinterested third party.

73 Tom

192. High Sierra mobile antenna recomendation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 01:02:13 UTC
From: Denis Sharon <denis.sharon@worldnet.att.net>
Message-ID: <pE0m5.25455$gW5.1365061@bgtnsc04-news.ops.worldnet.att.net>
Source record: 182710

Hello Everyone,

I'm about to install an HF rig in our motorhome. This will be my firt mobile experience (since 1961 anyway when I put a Gonset Communicator II in my Dad's car). The High Sierra HS-1500 MKII looks like a very nice antenna. Does anyone have any experience with it or, alternatively, does anyone have any particularly heartfelt recomendations?

Please reply directly to W1AOK@arrl.net.

Thanks,

Denis Sharon W1AOK
Ridgefield, CT

193. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 01:16:11 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <3998995E.C3767FD7@att.net>
Source record: 182711

Richard Clark wrote:

> Hi George,
>
> Did I kick some sand in anyone's face?

Judging from all the sputtering and coughing, et al, I really think that you did!

>
> My era is more aligned to Jack LaLane.

Actually, mine, too. I can still remember Atlas' picture on the back cover of seemingly every magazine on the stands in those days, though. And that was the scene of the infamous sand-kicking episode(s). I rank those ads right up there with the Gotham antenna ads!

>
> If one were to extend Charles's metaphor, then the exercise we find
> here in this topic is isophomoric (equally clumsy from any point of
> view).

Ah, yes - splendid!

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

194. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 01:40:19 UTC
From: k4ia@aol.com
Message-ID: <20000814214019.18696.00000224@ng-cp1.aol.com>
Source record: 182712

I have the 6 band model and like it very much. I think you will be surprised by the performance. I am using a Radioworks balun on mine. Problem with the balun is you need one that covers 6 meters. Mine doesn't but I don't know if it really degrades the peformance since I hardly ever go on 6 anyway.

The "goop" is the normal covering on the coils.

Call TGM with any questions. I have found them very helpful
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

195. Wanted info on Telex Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 01:59:41 UTC
From: sawman2@aol.com
Message-ID: <20000814215941.12299.00001278@ng-fb1.aol.com>
Source record: 182713

Need any and all information and manual for a Telex 55ft crank up tower.
Willing to pay for copies and postage. E-mail WB2HID@arrl.net

196. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 02:11:59 UTC
From: K5WX <keithk5wx@aol.com>
Message-ID: <3998A700.2810D7C4@aol.com>
Source record: 182714

Very good, Richard! I'm a QRP operator with limited space and am always looking for the next new antenna to give me an edge. I just worked several stations in Europe tonight with 1 watt to an Inverted Vee. I appreciate the information and explanations that you are providing to the group. I'll stick with my Inverted Vee a bit longer.

By the way, check out the nostalgia at http://www.charlesatlas.com/ .

73,

Keith, K5WX

Richard Clark wrote:

> On Tue, 15 Aug 2000 00:05:31 GMT, "George , W5YR" <w5yr@att.net>
> wrote:
>
> > >
> > >
> > >Richard Clark wrote:
> > >The pressure to maintain the original afloat has created a dynamic
> > >> tension with the desire to sink the replica. ^^^^^^^
> > > ^^^^^^^
> > >
> > >Richard, I had no idea that you were old enough to recall the famous
> > >trademarked concept behind Charles Atlas' famous body building course of
> > >the late 30's. He somehow stumbled upon what is know termed the
> > >isometric concept of exercise and branded it Dynamic Tension.
> > >
> > >I also suspect that, clever silver-tongued devil that you are, you
> > >deliberately planted this little phrase in order to see who was reading
> > >carefully (!).
> > >
> > >72/73, George W5YR - the Yellow Rose of Texas
> > >Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > >Amateur Radio W5YR, in the 54th year and it just keeps getting better!
> > >R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
> > >(12/99)
>
> Hi George,
>
> Did I kick some sand in anyone's face?
>
> My era is more aligned to Jack LaLane.
>
> If one were to extend Charles's metaphor, then the exercise we find

> here in this topic is isophomoric (equally clumsy from any point of
> view).
>
> 73's
> Richard Clark, KB7QHC

197. Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 02:20:38 UTC
From: k6mhe@arrl.net
Message-ID: <3998a89f.1598537@news.mcn.org>
Source record: 182718

On 14 Aug 2000 23:13:16 GMT, arrow146@aol.com (Arrow146) wrote:

>>Subject: Re: 2M/440 J-POLE~~~~~~ 300 OHM TWIN LEAD ANTENNA~~~~~~~~
>>From: RanHefner ranhefnerNOraSPAM@yahoo.com.invalid
>>Date: Mon, Aug 14, 2000 1:09 PM
>>Message-id: <08797c75.339c014e@usw-ex0102-014.remarq.com>
>>
>>Al, can you give us a source for the rods and bracket material
>>used in your 146/440 J-Pole?
>
>check a local hardware, building supply or surplus.
>
>I have mine delivered out of Denver.
>I have to buy 400 to 500 lb at a time.
>The angle comes in 25 foot lengths.
>the 3/8 rod is in 12 foot lengths.
>
>That is how I can sell the antenna so cheap.
>
>73 Al Lowe N0IMW

Allen,

That's inexpensive not cheap! Cheap means poor quality and that is not
your product... INEXPENSIVE that's the work..

Hi

Danny, K6MHE

198. Re: K2 FRACTAL FLYER: **New Antenna** LINK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 02:29:37 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3998AB8B.CD454B54@bellatlantic.net>
Source record: 182715

Fractenna wrote:

> <snip>
> 2) You want me to discuss something that's basically irrelevant.
>
If it is irrelevant, then why did you mention it in your
original post?

> Best,
> Chip N1IR

199. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 03:07:22 UTC
From: kk5yy@arrl.net
Message-ID: <3998b3af.127650996@nntp.mindspring.com>
Source record: 182716

On 14 Aug 2000 13:54:32 GMT, fractenna@aol.com (Fractenna) wrote:

>>hi, I built a fractal antenna from reading the patent
>>files on ibm patent website.
>>I guess I will be in court someday.
>>
>>I will post my findings on my website as soon as
>>I am able to start it up.
>>
>>jumbo
>>
>
>
>You will if you try to sell it or be involved in any commercial aspect.
>
>Cordially,
>
>NC

Only if your patent is granted my friend, only if your patent is
granted.

200. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 03:11:07 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8naccbklr3@bashir.peak.org>
Source record: 182719
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

In rec.radio.cb WildBill <wildbill @hose.com> wrote:
: sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
: would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
: be a 2:1 swr ... trim each end the same or add the same to each side to
: get your swr down to which every frequency is of your interest..

I have to disagree with this generalization. It is fine for any antenna that is close to 50 ohms impedance at resonance - but not a lot of help otherwise.

For example, some antennas are actually close to 30 ohms at resonance. You will radiate more power if the antenna is tuned for a SWR of close to 2:1, NOT 1:1. The problem is figuring out if that impedance is around 30 ohms or around 100 ohms - using just a SWR meter.

That is why it is recommended that the SWR meter is only used to make sure the impedance is within the range that the transmitter can handle. Tuning the antenna is done by field strength measurements - just tune for maximum radiated signal, and let the SWR become whatever it becomes. If it is out of the range that the transmitter can handle, then the antenna design needs modified in some way - then retune using the field strength meter.

--
Bill Nelson (billn@peak.org)

201. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 03:11:16 UTC
From: tellacom99@aol.com
Message-ID: <20000814231116.25678.00000611@ng-fl1.aol.com>
Source record: 182717

That's quite a design Richard, You did a cool job on it. Congrats on the new antenna.

I ran the numbers and found that the thing is pretty lacking in gain at low angles but the problem is so is everything else. A low height dipole is poor and a vertical isn't much better. N1IR got on here and said that this ugly wire thing beats a dipole. That has a ring of truth to it.

When I got to the fractanna sight I was actually pretty impressed with the data and presentation. Pretty clear why some people would need the antenna from that.

So my question is that if you think this thing is a dummy load what works better ? If someone can only out something small up and low in height what's going to work better for them? I think you have to give something better that fits in the space.

What's you got?

Anyone? Numbers please.

Ed

202. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 03:43:40 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3998BCDA.59D0F294@bellatlantic.net>
Source record: 182720

Richard,

What am I missing? This is an antenna with negative gain
that hears worse in one direction than another, is the devil
to build (by comparison to others), is extremely sensistive
to the environment, and is difficult, if not impossible, to rotate.

Did I get that right? If so, what am I missing? Why would
anyone want such an antenna? Is it just the fact that it
occupies a small space? I've been trying to figure out what
benfits, if any, can be realized with a fractal design. Chip
has been completely useless in helping me in this - I hope
you can. Thanks!

Richard Clark wrote:

> On Sun, 13 Aug 2000 17:20:44 -0500, Bill Aycock <baycock@hiwaay.net> wrote:
>
> >Sorry about using Peter's post for the base of a reply- but- I, too,
> >echo his thoughts- I am constantly amazed at the speed with which
> >Richard can decipher, re-list, and make a study, based on the little
> >Chip has made available.
> >
> >THe next posting from Chip, of course, will include both a disclaimer,
> >stating that Richard's stuff is all wrong, and threatening him for
> >posting "secrets" that are "protected" by "Patents Pending".
> >
> >Of course, by holding out on the rest of us, he has no defense that the
> >EZNEC file put forth by Richard is in error- WE, who could judge, have
> >no basis for comparison. THerefore, anything Chip claims is not
> >defendable.
> >
> >Bill
> >
>
> Hi Bill,
>
> You need no basis for comparison. My data equals or betters all characteristics already
> specified, this in itself testifies that my model is a true and accurate replication
> without being a duplication. It also testifies to the ability to clone a non-identical
> fractal without suffering degradation of key characteristics (actually I improved
them;-).
>
> Back when the "base flyer" was drug out on stage, I wondered why the short sightedness?
> Why no fractal form (obvious even at the time)? I looked into it - it was still a dog.

>
> So now we are giving benediction to dogs. However, if one had to choose between the k2 or
> one of those hoola hoop antennas; then we are talking about a niche market that has an
> honest need. Those folks appreciate and deserve the information. Too often these
> specialty antennas come with perplexing behaviors (like razor sharp tuning) and this is
> the proper forum for such discussion and reporting.
>
> The k2's success lies in planting it in good lossy ground. If the unfortunate operator
> were unaware of this and attempted to "optimize" it by raising the antenna (even 4
> inches), then disappointment would follow. Some other gentle soul would dutifully plant
> it 1 inch above ground, and then lay out radials. Such disappointment is undeserved for
> their effort.
>
> In software we call such designs "brittle." That is, the design meets all criteria, but
> change the environment slightly and it shatters.
>
> 73's
> Richard Clark, KB7QHC

203. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 03:50:58 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <C63m5.28365$_s1.348637@typhoon.ne.mediaone.net>
Source record: 182721

Yes, it's another poorly disguised NC, Nathan, Chipster entity....
Good try fracky...now another persona? "Ed"
How many of you are in there ?

204. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 04:11:05 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nafspklr10@bashir.peak.org>
Source record: 182725

Fractenna wrote:
:
: >hi, I built a fractal antenna from reading the patent
: >files on ibm patent website.
: >I guess I will be in court someday.
: >
: >I will post my findings on my website as soon as
: >I am able to start it up.
: >
: >jumbo
: >
:
: You will if you try to sell it or be involved in any commercial aspect.

Wrong, as has been repeatedly pointed out to your.

First, you do not have a patent, so you do not have patent protection. Until you get that patent, anyone can use the information you supply to manufacture and sell devices based on your design.

If the antenna is built using information that is based on other patents in existance, then you would have to prove that your patent variation is not derivitive.

By publishing at least a variation of your design, you have just thrown away most of the enforceability of any patent you may receive. Such "trade secrets" are not called that just to be using large words. If intellectual property is willing divulged by someone having the right to do so, then it no longer is intellectual property.

--
Bill Nelson (billn@peak.org)

205. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 04:11:53 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nafu9klr11@bashir.peak.org>
Source record: 182726

Gerald Schmitt <kk5yy@arrl.net> wrote:
:>
:>You will if you try to sell it or be involved in any commercial aspect.

: Only if your patent is granted my friend, only if your patent is
: granted.

And only for any devices that are produced after the patent is granted.

--
Bill Nelson (billn@peak.org)

206. Re: {{{ MOBILE ANTENNA MOUNT QUESTION }}}

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 04:15:18 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <3998C47A.4ABDA2A3@earthlink.net>
Source record: 182722

Because antennas don't "disappear" from the top of high vehicles!

Tim Moore wrote:
>
> Why drill a hole?? They make some nice mounts that fit the lift gate and don't
> require a hole -- albeit its not as high and the radiation pattern won't be as
> good but.......... no holes either.
>
> Watch your tires too!!
>
> STUDIO DED wrote:
>
> > Thanks for any and all input on my dilemma. I'm going to install (read: DRILL
> > HOLES FOR) multiple NMO mounts in the roof of my Ford Explorer. I have 2
> > questions.
> >
> > #1 What is the better material to buy the mount in?
> >
> > stainless steel, or brass? They are available in both.
> >
> > #2 What size mount is the best to use 3/4" (install from the top-LARGE HOLE)
> > NMO or 3/8" (bottom install-smaller hole) NMO?
> > I will be using various VHF & UHF (18"-45") antennas.
> >
> > Any other "installation tips" are appreciated. Thanks to all who respond.
> >
> > Dave studioded@aol.com
> > N9DAV
>
> --
> Tim Moore
> Transmitting to you "Live" from Fredericksburg, VA
> tim@tm52.com

207. Re: Thank you Richard Clark

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 04:19:32 UTC
From: k1bqt@aol.com
Message-ID: <20000815001932.05579.00001056@ng-cd1.aol.com>
Source record: 182723

Answer your tellacom, Richard, it's rigning!. Another AOL with no posting history calling!

Rick K1BQT

208. Re: K2 FRACTAL FLYER PERFORMANCE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 04:23:34 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3998C635.8F91C854@bellatlantic.net>
Source record: 182724

Fractenna wrote:

> I invite all radio amateurs to find, through modeling, the field strength and
> F/B of these other antennas, and compare to the elevation power pattern shown
> on that page.

Oooops! There goes any possible basis for your
lawsuit against Richard Clark, which was baseless
in the first place. A public invitation to view data
you yourself make available, and make comparisons.
Shot yourself in the foot again, didn't you Chip?

Of course, it didn't take this post. You've been
inviting people to that site all along.

Chip, what is WRONG with you?

209. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 05:07:41 UTC
From: kleing@NOSPAMqualcomm.com
Message-ID: <39a0ccd4.653559829@news>
Source record: 182727

On 15 Aug 2000 04:11:05 GMT, Bill Nelson <billn@spock.peak.org> wrote:

>By publishing at least a variation of your design, you have just thrown
>away most of the enforceability of any patent you may receive. Such "trade
>secrets" are not called that just to be using large words. If intellectual
>property is willing divulged by someone having the right to do so, then it
>no longer is intellectual property.

Not true at all. The patent itself discloses the design. In the USA,
one may publically disclose (or offer for sale) one's invention prior
to patent award without loss of patent protection provided that such
disclosure occurs not more than 1 year prior to the filing date of the
patent application. As far as I can see, Skip has not lost any IPR
because of anything he's posted here. But I don't know his filing
date nor have I researched his posting history.

Klein, WT6G
Not a patent attorney. Your mileage may vary.

210. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-15 20:58:27 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <3999ae30$0$788$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182578

Hi Al,be careful with the balun,be sure that it is rated ABOVE 30Mhz,99% of commerical baluns arn't
ferrite beads FT1020 type 43 material, 1"x.50"x1/1/4" 5 of them slipped over the coax at the feed point, will do a better job from 3 to 60mhz with no power restriction,and showing between 500-1000ohms across the freq span, yes same as you,i was very surprised at the antennas performance,i had 4 visiting hams in the shack yesterday to chek it out,all were very very surprised.
rgds Dennis.

211. Re: Best MICRO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <iOwm5.1962$M%6.6281@newsfeed.slurp.net>
Source record: 182419

Get any old inexpensive Pentium-class laptop which has the ports you require. I run the Kenwood software, logging, 'net, cw/rtty/fillintheblanktor ,whatever, in various windows, on an old ARM laptop.

73 & GL, Dave, K3BHJ

212. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11031-399A9999-16@storefull-114.iap.bryant.webtv.net>
Source record: 182420

Rich Grise wrote:
"I could get into a lively discussion about the "Lightning is RF" part, in that I`d say it`s more like a spike, which has harmonics all the way up the spectrum,---."

Lightning is a large visible electrical discharge in the heavens. Stored atmospheric potentials become large enough to break down the air`s insulating ability and the discharge starts.

No RF is stored in the atmosphere. Latent electrical charges inhabit the atmosphere. It is the abrupt start, stop, and random motion of charge flow that contain elements of radio frequency.

The mass migration of atmospheric charge called lightning contains much energy which is not classified as RF. "Lightning is RF" is a poor definition.

Best regards, Richard Harrison, KB5WZI

213. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399a99b3.16814959@news.akorn.net>
Source record: 182421

On 16 Aug 2000 13:17:08 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>Suggestion to Freak: If you need more supporting actors/personalities go to
>other than AOL services, get some more names, use them to post messages to
>other NG to create delusion of legitimacy (careful so you don't sound like you
>do) and then use it on this NG. Maybe you will get away with it. (I doubt it,
>by now we know that only person who agrees and "supports" him is one of him.)
>But go ahead anyway, we enjoy your "conversations" with yourself.
>Hope it helps eventually :-
>BUm

Sooner or later he will figure out how to disguise the fake people he
talks to, and who he invents to support his nonsense. When he does, it
will be the final gasp of this newsgroup.

It will be all him answering him in every thread.

He reminds me of the old song line that went "I'm gonna sit right
down and write myself a letter".

73 Tom

214. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11031-399A9D04-18@storefull-114.iap.bryant.webtv.net>
Source record: 182422

Rich Grise wrote:
"---I`d never have guessed that concrete has a better conductivity than dirt."

Had Rich worked on electrical equipment without personal insulation from a concrete floor, he might have had a contact experience to arouse an instant realization of concrete`s conductivity.

Best regards, Richard Harrison, KB5WZI

215. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: jh-lewis <jh-lewis@swbell.net>
Message-ID: <gxxm5.633$nj6.190221@nnrp3.sbc.net>
Source record: 182423
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

The antenna they call a G5RV is simply a dipole antenna, 102' feet long, with about 32' of ladder line feed in. Some people attach the ladder line to coax and bring that into the shack, some just feed the ladder line into the shack - I've tried both and settled for just using the ladder line to my tuner...works like a champ.

With a tuner (it need not be an expensive one - check MFJ) you can run all ham bands with this antenna and it's very cheap to build. Don't buy a commercial version - try building your own - it's a lot of fun and you'll learn a few things that simply writing a check wont teach you. :))

Hope this helps...

John

<jason_hsu@my-deja.com> wrote in message news:8ncoci$58u$1@nnrp1.deja.com...
> How precisely cut must a wire antenna be? I have heard about 1/2
> wavelength wire antennas, but if the wire must be close to this length,
> then you can only use one band or are willing to have several different
> antennas. I know that tuners are intended to correct mismatches, but I
> have heard that performance does suffer if the mismatch to be corrected
> is high enough and that an even bigger mismatch can be too much for a
> tuner to handle.
>
> Can anyone shed some light on this? I'm confused.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/tech-dwdm.html
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

216. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11031-399AA1F1-21@storefull-114.iap.bryant.webtv.net>
Source record: 182424

Tom, W8JI wrote:
"There is absolutely no way a resonant circuit can work."

A 1/4-wave shorted stub is a resonant circuit with only two terminals
and it does work.

My old Radio Handbook, ARRL Antenna Book, and many other publications
have examples. Many have been published continuously during the past 50
years. Had they not worked, publication of these examples in respected
issues would have subsided.

Best regards, Richard Harrison, KB5WZI

217. Wanted: Anechoic Wedgies

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000816110036.08704.00000012@ng-da1.aol.com>
Source record: 182425

Once again, looking for used anechoic absorbing material, such as Cumins products, and so on. Need about 100 square feet this time. If you want to part with this at a reasonable price please send me e-mail.

Thanks!
Chip N1IR

218. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399AACA1.B80D7630@wb6hqk.ampr.org>
Source record: 182426

Richard Harrison wrote:
>
> Bart, WB6HQK wrote:
>
> "The trick is that the stub is perpendicular to the primary radiating
> elements and is resonant for the common mode."
>
> That makes the series current path through the 1/4-wave stub 1/2-wave
> long. This stub then produces 180 degrees of delay to add to the 180
> degrees of delay in a 1/2-wave dipole. 360-degree phase rotation puts
> the starts of current in the antenna elements in phase.

Are you saying the current entering one terminal of the stub is phase shifted compared to the current in the other terminal, by an amount equal to the electrical length of the stub?

Kirchoffs law states that for any two terminal device, the current entering one terminal must be equal to the current leaving the other. They must be identical at every point in time or the device is not a so called 'two terminal device'.

If the two currents are always identical, how can any phase shift be introduced by a two terminal device?

bart
wb6hqk

219. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: kleing@NOSPAMqualcomm.com
Message-ID: <399a9e89.38050864@news>
Source record: 182427
Cross-posted to: alt.engineering.electrical,alt.comp.hardware.homebuilt,rec.radio.amateur.antenna,sci.electronics.basics

I'm a little confused about something. I thought I had heard stories
about grounding arrangements for towers that could result in the
concrete in the footing "exploding" when the tower is hit by
lightning. What would cause this if concrete and rebar is a good
ground? What should you do (and not do) in construction of the
footing to avoid this kind of catastropic distruction of the footing?
Or am I just totally confused?

Klein, WT6G

On Sat, 12 Aug 2000 13:49:45 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>On Fri, 11 Aug 2000 17:40:29 -0700, Rich Grise <richgrise@vel.net> wrote:
>>tom w wrote:
>>...
>>> If we were serious about
>>> lightning, then all homes might have Ufer grounding - which
>>> already exists in all homes but is not connected - because we
>>> still build homes as if the transistor did not exist.
>>
>>OK, I give up. What's "Ufer grounding?"
>
>During WWII, the Army had problems with ammo bunkers
>blowing up due to lightning strikes. They called in Dr. Ufer
>to find a solution. He found that they were using inadequate
>grounds based on driven ground rods to terminate their
>lightning rods. He figured that a very good lightning ground
>would be rebar in concrete, with all the rebar bonded together
>and brought out to a grounding terminal. When this technique
>was employed, lightning triggered ammo bunker explosions
>stopped happening.
>
>This technique, named after him, was adopted as a preferred
>grounding technique by the National Electrical Code. Code
>requires a minimum Ufer ground to consist of a minimum of 20
>lineal feet of half inch rebar in concrete at least 2 inches thick.
>(More is better, of course.)
>
>In typical slab construction, there may be several hundred
>feet of rebar, and 6 or more inches of concrete. This forms
>a highly effective connection to Earth two different ways.
>First, it forms a large capacitor plate, with the other plate
>being the Earth. This capacitor will have a small reactance

>and couples RF to ground very effectively (lightning is RF).
>
>Second, the concrete, which is a better conductor than
>typical soil because of the ionic nature of the cement,
>forms a large sheet conductance bonded face to face
>to the large sheet conductance which is the Earth. In
>effect we have billions of resistors in parallel, which
>results in a very low total resistance to currents flowing
>to or from Earth.
>
>That's what makes a Ufer ground a preferred way to
>establish a connection to Earth.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

220. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000816110900.08704.00000015@ng-da1.aol.com>
Source record: 182428

>Been reading the mail. At least N1IR gave something to test.Got the mfj 224
>up
>and tested the flyer to a vertical with 8 radials on 52 direct. Have a flat
>grassy backyard here.
>
>From 70 ft away the flyer has a gain down by less than 1/2 to 1 db from the
>vertical and the backside is down 11 to 12 db. I used a 4 element beam on the
>rx end and my beam was up 15 feet.
>
>Make your own conclusions. Just keep me out of the hate fest.
>
>MarkW
>
Hi Mark!

Thanks for the follow up. If you wish you can post the data on the hampage6 site, or elsewhere.

I've been swamped by e-mails. About 1/3 are really puzzled by the negative gain values(the web site gives the NEC pattern at 10 degrees as about -4 dBi). It is truly unfortunate that a few mischievous hams mislead others into thinking a low dipole, or vertical, has positive gains at low angles in real situations. Also very unfortunate how one has misled with claims of 15 ohms of ground losses--when such losses cannot be determined by NEC in the way it was used.

I suppose we will next see some claim that the 2M MEASUREMENTS are not in any way applicable--even as a guide--to 20M.

Sigh.

Let me know when you have the 30M K2 up.

73,
Chip N1IR

221. Need SWR meter info

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <20000816110951.02426.00000453@ng-cg1.aol.com>
Source record: 182429

I picked up a Rohde and Schwarz SWR meter at a hamfest last year. Its been laying in the corner since. Is this a good meter? Seems to work on 2m OK. I went to their website but could not find anything on the meter. They look like they make some first class test equipment just going by the website.

222. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11031-399AAC6A-26@storefull-114.iap.bryant.webtv.net>
Source record: 182430

WB6SHI wrote:
"Vote Republican, save your butt."

If you have to vote Republican to save your butt, you are in the same position as recommended to those caught in a thunderstorm. You have your ass pointed at the sky and your head between your knees.

Best regards, Richard Harrison, KB5WZI

223. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: The Green Hornet <jlockett@onemain.com>
Message-ID: <cnym5.22040$T73.815804@nntp1.onemain.com>
Source record: 182431
Cross-posted to: alt.engineering.electrical,alt.comp.hardware.homebuilt,rec.radio.amateur.antenna,sci.electronics.basics

I would be most interested in your comments as I always thought it was
dangerous to run a ground to the rebar in a tower base. I have my rebar
'floating' in the concrete tower base, with a seperate ground hooked to
the tower and connected to several external ground rods all hooked
together...Are you saying to this incorrect?

regards, Jerry -w7wpx-

jlockett@lightspeed.net

"Klein Gilhousen" <kleing@NOSPAMqualcomm.com> wrote in message
news:399a9e89.38050864@news...
> I'm a little confused about something. I thought I had heard stories
> about grounding arrangements for towers that could result in the
> concrete in the footing "exploding" when the tower is hit by
> lightning. What would cause this if concrete and rebar is a good
> ground? What should you do (and not do) in construction of the
> footing to avoid this kind of catastropic distruction of the footing?
> Or am I just totally confused?
>
> Klein, WT6G
>
> On Sat, 12 Aug 2000 13:49:45 -0400, Gary Coffman <ke4zv@bellsouth.net>
> wrote:
>
> >On Fri, 11 Aug 2000 17:40:29 -0700, Rich Grise <richgrise@vel.net>
wrote:
> >>tom w wrote:
> >>...
> >>> If we were serious about
> >>> lightning, then all homes might have Ufer grounding - which
> >>> already exists in all homes but is not connected - because we
> >>> still build homes as if the transistor did not exist.
> >>
> >>OK, I give up. What's "Ufer grounding?"
> >
> >During WWII, the Army had problems with ammo bunkers
> >blowing up due to lightning strikes. They called in Dr. Ufer
> >to find a solution. He found that they were using inadequate
> >grounds based on driven ground rods to terminate their
> >lightning rods. He figured that a very good lightning ground
> >would be rebar in concrete, with all the rebar bonded together
> >and brought out to a grounding terminal. When this technique
> >was employed, lightning triggered ammo bunker explosions

> >stopped happening.
> >
> >This technique, named after him, was adopted as a preferred
> >grounding technique by the National Electrical Code. Code
> >requires a minimum Ufer ground to consist of a minimum of 20
> >lineal feet of half inch rebar in concrete at least 2 inches thick.
> >(More is better, of course.)
> >
> >In typical slab construction, there may be several hundred
> >feet of rebar, and 6 or more inches of concrete. This forms
> >a highly effective connection to Earth two different ways.
> >First, it forms a large capacitor plate, with the other plate
> >being the Earth. This capacitor will have a small reactance
> >and couples RF to ground very effectively (lightning is RF).
> >
> >Second, the concrete, which is a better conductor than
> >typical soil because of the ionic nature of the cement,
> >forms a large sheet conductance bonded face to face
> >to the large sheet conductance which is the Earth. In
> >effect we have billions of resistors in parallel, which
> >results in a very low total resistance to currents flowing
> >to or from Earth.
> >
> >That's what makes a Ufer ground a preferred way to
> >establish a connection to Earth.
> >
> >Gary
> >Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> >534 Shannon Way | We break it |
> >Lawrenceville, GA | Guaranteed |
>

224. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000816113409.07402.00001431@ng-cb1.aol.com>
Source record: 182432

>From: fractenna@aol.com (Fractenna)
>Date: Wed, Aug 16, 2000 9:09 AM
>Message-id: <20000816110900.08704.00000015@ng-da1.aol.com>

>I've been swamped by e-mails.
>73,
>Chip N1IR

Just answer the e-mails you write to yourself.
No need to post them here.

225. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ab2a2.23199759@news.akorn.net>
Source record: 182433

On Wed, 16 Aug 2000 08:00:49 -0700, Bart Rowlett
<bart@wb6hqk.ampr.org> wrote:

>Kirchoffs law states that for any two terminal device, the current
>entering one terminal must be equal to the current leaving the other.
>They must be identical at every point in time or the device is not a so
>called 'two terminal device'.
>
>If the two currents are always identical, how can any phase shift be
>introduced by a two terminal device?
>
>bart
>wb6hqk

There certainly can not be any phase shift unless a shunting path is
involved!

The load of the second section can fulfill that function, but that
still limits phase shift to 90 degrees maximum if the device between
the sections is a two terminal device.

Anyone who has ever built and measured an antenna with lumped
components in a "phasing section" would find that out. All you really
have is a series resistance with zero phase shift at resonance, and
very little phase shift off the resonant frequency.

73 Tom

226. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <10030-399AB5FD-22@storefull-115.iap.bryant.webtv.net>
Source record: 182434

Klein, WT6G wrote:
"What would cause this (exploding) if concrete and rebar is such a good ground?"

Too much current in a part of a tower footing which is not such a good ground causes the explosion. Resistance produces heat. Concrete contains moisture (it never completely dries). Hot moisture generates superheated steam which explodes the concrete much as tree trunks which you may have seen exploded by lightning.

This is prevented by bypassing the strike around the tower footing with an even higher conductivity path. Heavy copper condutors and multiple ground rods are used.

Best regards, Richard Harrison, KB5WZI

227. PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <splfpbi3r5j75@corp.supernews.com>
Source record: 182435

Does anybody know of a manufacture who makes a line of UHF style connectors using a web structure, i.e. the dielectric is mostly air, to hold the center conductor in place? I have seen this design used for mobile antenna mounts for UHF antennas, and for coax connections used on V/UHF SWR - Watt Meters. I don't know if these connectors are custom designs or are available as stock items.

--
Leland C. Scott
KC8LDO

228. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <19910-399ABD1E-63@storefull-116.iap.bryant.webtv.net>
Source record: 182436

Bart, WB6HQK wrote:
"If two currents are always identical, how can any phase shift be
introduced by a two terminal device?"

No need to complicate with energy storage, instant versus effective,
etc.. Two examples most will instantly recognize: pure L and pure C.
Either has orly two terminals and produces 90 degrees of phase shift
between current and voltage.

Best regards, Richard Harrison, KB5WZI

229. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399AC67A.5F145197@usa.alcatel.com>
Source record: 182437
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

As luck would have it, I am in possession of a PRD angle of reflection coefficient bridge. That's all it does, give the angle of the reflection coefficient. But as you point out, this is necessary information for creating a match.

It's a neat looking gadget, and serves very well to estimate a job applicant's ability to think beyond the box when given an RF problem.

Cheers,

Cortland
(ka5s@saber.net)

ehsjr@bellatlantic.net wrote:

> The question was how do you measure impedance.
> An swr meter does not measure impedance. An swr
> meter (more properly, VSWR meter) measures a
> ratio of the voltage in the forward direction (ie out
> to the antenna) versus the voltage in the backward
> direction (ie back into the transmitter, reflected from
> the antenna). The bigger the reflected voltage, the
> higher the swr. An swr meter, nevertheless, is a good
> indicator of whether impedance is matched at 50 ohms,
> as you pointed out. It is certainly not the best.
>
> But impedance consists of 3 elements - capacitive
> reactance, inductive reactance and resistance.
> A true impedance measurement would be expressed
> as so many ohms, not as a ratio. And, typically,
> one would find expressions that look something like
> this: 23 +14 Jx That reading indicates the the
> complex impedance consists of 23 ohms resistance
> plus 14 ohms inductive reactance. If the expression
> were 23 -14 Jx it would mean 23 ohms resistance
> plus 14 ohms capacitive reactance.
>
> Now, why is this important? Because you want all
> of the power going out to the antenna to "see"
> nothing but resistance. In the case of an antenna
> with 23 ohms resistance plus 14 ohms inductive
> reactance (23 + 14Jx), the only power radiated
> by the antenna is the power across the 23 ohms
> resistance. The power across the 14 ohms inductive
> reactance is wasted. So - you want to get rid of

> that +14 Jx, even if it leaves you with 23 ohms,
> and an swr worse than 2:1. Why? Simple.
> You transform the 23 ohms to 50 ohms. Now there
> is no reflected voltage (no reflected power when there
> is no reflected voltage) and all of the power reaching
> the antenna is radiated, rather than having some of
> it wasted in Jx. There are a number of ways to
> transform the impedance, at the antenna, to achieve
> the maximum radiation of the available power. Pruning
> the antenna (cutting the wires smaller and smaller while
> observing the swr reading getting closer and closer to 1.1
> to 1) is one example. In a beam antenna (which would
> have an impedance in the low to mid 20's with some
> Jx reactance as in teh example expressions I used) a
> typical transformation AND elimination of the Jx is
> accomplished with a gamma match. A gamma match
> includes a transmission line transformer (which introduces
> + Jx (inductance) AND transforms the resistance from
> 23 ohms to 50 ohms) and a capacitor. The capacitor
> introduces -Jx. The +Jx is unavoidable, as it is necessary
> to attach the feed line to the center of the element and to
> some point away from the center to achieve 50 ohms
> resistance. The length of wire that allows attaching the
> center conductor of the feed line (the shield is attached
> at the center) to the 50 ohm point somewhere out on
> the element away from the center introduces the extra
> inductance - the +Jx. Now, if you have an accurate
> impedance measurement and know how much inductive
> reactance has been added to get to 50 ohms resistance,
> you can compute the value of capacitance needed to
> produce an equal amount of - Jx. Finally, in all cases
> above where the term resistance was used, the correct
> term is radiation resistance. I won't get into a discussion
> of that here, other than to say that it indicates that the
> signal it (the radiation resistance) "sees" is the signal
> it radiates out of the antenna. It is not the same as
> the resistance we talk about at the electronic component
> level, The signals those resistances "see" are converted
> to heat, not radiated.
>
> That is important stuff if you want to really make your
> antennas perform well. The simplest concept is this:
> you can get a good match (ie swr is 1.1 to 1) and have
> a lousy radiator. If you had, for example, 1 ohm of
> radiation resistance plus 49 ohms of inductive reactance, then
> most of your signal would be converted to heat in the
> inductor - only about 2 percent would be radiated.
> Clearly, you would want it to be the other way around!
> So, that's why there needs to be a distinction made
> that swr meters do not measure impedance.

>
> WildBill wrote:
>
> > sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
> > would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
> > be a 2:1 swr ... trim each end the same or add the same to each side to
> > get your swr down to which every frequency is of your interest..
> >
> > "sideband" <sideband@cac.net> wrote in message
> > news:3998450D.E150C5AB@cac.net...
> > > Doc:
> > >
> > > Thanks for this.
> > >
> > > Another question, now... If the impedance isn't 50 ohms (how do you
> > > measure this, anyway?) What would my options be to get it matched up?
> > >
> > > TIA
> > >
> > > -SSB
> > >
> > >

230. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <399AC912.565DEB79@NO.excite.SPAM.com>
Source record: 182438

No, I have not. But if you are worried about loss or an impeadance hump, just use "N" connectors. They are not that expensive and may be cheaper the this "custom" type of UHF connector.

231. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: kleing@NOSPAMqualcomm.com
Message-ID: <399bbc95.45742364@news>
Source record: 182439

On Wed, 16 Aug 2000 10:40:45 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Klein, WT6G wrote:
>"What would cause this (exploding) if concrete and rebar is such a good
>ground?"
>
>Too much current in a part of a tower footing which is not such a good
>ground causes the explosion. Resistance produces heat. Concrete contains
>moisture (it never completely dries). Hot moisture generates superheated
>steam which explodes the concrete much as tree trunks which you may have
>seen exploded by lightning.
>
>This is prevented by bypassing the strike around the tower footing with
>an even higher conductivity path. Heavy copper condutors and multiple
>ground rods are used.
>
>Best regards, Richard Harrison, KB5WZI

Thanks for the response. So are you saying that you would NOT tie together the rebar in the footing? I.e., try not to make it such a good ground relative to the ground rods, etc?

Why don't the Ufer grounding systems explode when struck?

I'm confused

Klein, WT6G

232. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399AD065.CB415828@usa.alcatel.com>
Source record: 182440

The device called a Constant Current Antenna uses series capacitors to resonate wire sections. That resonance can only occur if the phase shift due to inductance in the wire is equalled by an opposite phase shift in the series capacitors. The capacitors are not three terminal devices. What does the model look like that requires a three terminal device for this resonance?

Cortland
(ka5s@saber.net)

Tom W8JI wrote:

> On Wed, 16 Aug 2000 08:00:49 -0700, Bart Rowlett
> <bart@wb6hqk.ampr.org> wrote:
>
> >Kirchoffs law states that for any two terminal device, the current
> >entering one terminal must be equal to the current leaving the other.
> >They must be identical at every point in time or the device is not a so
> >called 'two terminal device'.
> >
> >If the two currents are always identical, how can any phase shift be
> >introduced by a two terminal device?
> >
> >bart
> >wb6hqk
>
> There certainly can not be any phase shift unless a shunting path is
> involved!
>
> The load of the second section can fulfill that function, but that
> still limits phase shift to 90 degrees maximum if the device between
> the sections is a two terminal device.
>
> Anyone who has ever built and measured an antenna with lumped
> components in a "phasing section" would find that out. All you really
> have is a series resistance with zero phase shift at resonance, and
> very little phase shift off the resonant frequency.
>
> 73 Tom

233. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <AdWaOW88Ao5rckb53uvV1NwMRHuP@4ax.com>
Source record: 182441

On Wed, 16 Aug 2000 04:22:07 GMT, ehsjr@bellatlantic.net wrote:

>Geez Richard, I don't know. But I think you can get a
>broader match with a 50 ohm resistor at the end of
>the coax. Suspend it inside half a tennis ball which is
>lined with copper, and you'd probably get a pretty
>good F/B ratio. You'd certainly have small space,
>and might not be impacted by the environment. I've
>actually worked people off a dummy load - amazingly
>both of us heard each other. I can't claim DXCC
>that way - more like QVDLIYGA (QSO - Very Damn
>Lucky If You Get Any).
>
>What's left? Gain. I can't control the 100+ db
>attenuation at distance - all I can try to control
>is how much signal I can collect (or radiate)
>at my location, and the direction I want my
>"signal collector/radiator" to favor. Q - maybe
>I can make the collector real narrow with
>a better S/N ratio - but the Fractal apparently
>is pretty broad.
>
>I may be forced to try to build one of these
>things just to satisfy myself. The tennis ball
>contraptuion will be easy by comparison.
>But how would a "real" antenna compete?
>Suppose you went vertical with a slinky,
>occupying the same height as the Fractal.
>I *assume* you could match it at 50 ohms
>by selecting the right points on the slinky.
>I haven't done it so I don't know. But
>overall, wouldn't that be a more effective
>antenna on say 20 meters than a Fractal,
>even with no F/B on the slinky? You could
>even add another slinky within the .2
>wavelength box as a director or reflector.
>I dunno - maybe you couldn't stretch the slinky
>far enough within 1/8 wave to make it play.
>Certainly the slinky idea is physically far
>easier to implement than the fractal - whether
>it would outperform the fractal is beyond me.
>Heck - maybe a 1/8 wave whip with loading
>coil and radials would outperform the Fractal,
>at the cost of no F/B. After all, you can

>squeeze an awful lot of distance out of a very
>small vertical - I'm thinking of 80 meters mobile.
>Maybe the REAL test of a Fractal is in a mobile,
>where small height is real important.
>
>I just don't know. Worse, I want to build one of
>these things so I can understand their performance
>first hand. But I don't know how. I can't figure
>out the element lengths nor the X-Y-Z angles
>between the elements. I'm afraid someone
>brighter than me will have to publish that information
>if I am to be able to build one.
>
>But - on the plus side - your post and diagram
>are GREAT. At least now I am beginning to learn
>something about these beasts, which is what I've
>been trying to do for quite some time. I may be
>missing a lot here, but whatever I am getting is
>directly as a result of your help. And I really
>appreciate that. Thanks!

Hi OM,

I am heartened by your desire to investigate these antennas. However, David's point about this being a labor of love is not to be overlooked. In such pursuits are the hazard of being disappointed.

I think there was some effort of recovery put forward in claims that there are a lot of terrible antennas that make the k2 looked good in comparison. Of this there is no doubt. And on the flip side there are a lot of lousy fractals that make this list of contenders look like winners. Picking your villains to make your hero look good reveals a basic weakness.

I have no interest in any particular design, I approach them all with neutral expectations and await for them to reveal where they fit in the scheme of things. The most interesting of traits to emerge (for my interest that is) were the designs I call wide-band at my pages. These are very high Z antennas at 377 Ohms (nice to pick something that also corresponds to the Z of free space) and they are VERY BIG constructions when wavelength is taken into account.

It is too bad that they are both big and complex. The complexity (the undiscussed cost) is something I cannot come to terms with when others ask for an example to start with. I have so much data at my pages that I pose that vast assemblage as an example of the tyranny of choice.

You may note through all the postings that no one suggests that they would build the k2 for 80M, or 40M, and the 20M example is just that, an example with all effort being put into 2M models. This is tacit admission that the k2 is not ready for HF.

You may also note the slippery slope of comparisons being made (already noted by one of our new wags). The k2 occupies a 3 dimensional space fully, and yet the counter examples are all restricted to smaller volumes. This is another reason why I only compare my

designs against two variations. The first is for my designs that "consumes" the same amount of wire as the standard monopole they are compared against. The second variation is for my designs that stand as tall as the standard monopole (and thus consuming more wire than the standard). On the one hand, I do replicate the duality of comparison (comparing large volume designs to the restricted volume of the monopole), and on the other hand I also consider the comparison of large volume designs to large volume designs.

As for complexity, let's review the k2 once again at the 80M scale. Can you imagine the problems of supporting all these angled members with a network (cobweb if you will) of ropes from many supports all trying to maintain the geometry? This is probably the biggest joke of fractals. The claim that they are small belies the necessity of ancillary structures that lend nothing to the electrical properties.

Let's face it, to support the k2 requires at least three vertical structures when we get into the scales of HF (stiff wire holding the shape of the fractal even at 20M is not a reality). This is why all such examples of "superb" designs are rarely implemented below 28 MHz. Note I said three vertical structures but what is holding that fourth lowest point off the ground? I doubt that stiff wire would suffice and we have yet another vertical element being added just to support this end of the "monopole."

This sounds like a stiff price to pay when the same structures are denied to alternative designs (the slippery slope of comparison again). But if you are going to step into the work of constructing a fractal, you are going to have to come to terms with the practical requirements (and is one reason why I unashamedly ignore them and dwell only on the theoretical).

In my mind, the simplest design would be along the lines of an inverted fractal V. One mast or support with a spray of insulated guys is used to hold the various bends and turns in place. This is not very elegant, but I think this would be a good introduction.

Also, I wouldn't worry about exact geometries or wire lengths. My replication of the k2 goes to show that even sloppy attempts to duplicate can lead to improved traits (although this was fortuitous and is not offered as a guarantee). I even added the transmission line to the model (it is in the vertical plane of a vertical polarized antenna after-all) and improved the traits even further.

Given that slop can so easily improve this wonderful new design, it is no surprise that the $1000 challenge died on its feet at such a tender young age. Then again, Bart's simple questions may have hastened that death long before the k2 appeared.

73's
Richard Clark, KB7QHC

234. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399ADB8B.7641E211@eznec.com>
Source record: 182442

It sounds to me like two different things are being compared here. The currents at the two terminals of a capacitor are in phase. The currents at the two terminals of an inductor are in phase. Neither will produce a phase shift in the current from input to output. No two-terminal device (of zero length) can -- it violates Kirchoff's law.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Bart, WB6HQK wrote:
> "If two currents are always identical, how can any phase shift be
> introduced by a two terminal device?"
>
> No need to complicate with energy storage, instant versus effective,
> etc.. Two examples most will instantly recognize: pure L and pure C.
> Either has orly two terminals and produces 90 degrees of phase shift
> between current and voltage.
>
> Best regards, Richard Harrison, KB5WZI

235. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ad87c.32890299@news.akorn.net>
Source record: 182443

On Wed, 16 Aug 2000 10:33:25 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>The device called a Constant Current Antenna uses series capacitors to
>resonate wire sections. That resonance can only occur if the phase shift due
>to inductance in the wire is equalled by an opposite phase shift in the
>series capacitors. The capacitors are not three terminal devices. What does
>the model look like that requires a three terminal device for this
>resonance?
>
>Cortland
>(ka5s@saber.net)

The reason why that works is simple.

The antenna has a field that couples to space and to other parts of
the circuit.

Phase shift is limited to a maximum of 90 degrees lead or lag when a
two terminal device, even with multiple components inside that device,
is connected in a system like this.

If the antenna had no common mode impedance, phase shift would not be
possible through the two terminal component or circuit.

If the two terminal device is resonant, it can have no phase shift at
all. Maximum phase shift occurs when the two terminal device drives a
zero impedance load, and the series reactance is infinite. In that
case, shift is 90 degrees. In other cases shift is less than 90
degrees, unless there are multiple components and there is a third
terminal.

A stub can have a third terminal from its somewhat low common mode
impedance (if the stub is arranged correctly), a simple L/C circuit
can not (at least not much because the common mode impedance is
extremely high).

73 Tom

236. Re: EZNEC Q?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399ADF9E.B33E93B2@eznec.com>
Source record: 182444

Yuri Blanarovich wrote:
>
> I am plunging into intricacies of antenna modeling using EZNEC.
> Have some questions:
>
> 1. I see that metric formula for wavelength is not 300/f as we used to use.
> What is the reason for 298 something, air dielectric? More precise speed of
> light/RF?

EZNEC uses 299792500 m/sec as the speed of light. This is correct to seven decimal digits, according to the _Handbook of Chemistry and Physics_. 300 million is just fine, but the more precise value is no problem for the program.

> 2. When modeling quad loops, what are the recommended segment length in the
> vicinity of the corners? I understand that programs are having problems with
> sharp wire corners. Say recommendation for 15m loop.

Six segments per side is plenty, and you can get good results with even fewer. There's no special requirement for short segments near the corners. This was a problem with MININEC-based programs, but NEC-2, which EZNEC uses, doesn't have this problem.

> 3. Resultant pattern plots, are they containing both polarizations, or is there
> way to see each polarization separately?

You can have the program show you H, V, and total separately, or just total. In the Control Center, open the Plot menu and choose 2D Fields to Plot.

> 4. With windows version, is it possible in the near fututre to see results of
> wire manipulation by mouse on the SWR and pattern plots? It would be really
> neat for optimization exercises.

Do you mean, could you move a wire with the mouse, and immediately see the SWR or pattern plot change? No, not in the near future.

Roy Lewallen, W7EL

237. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Firestone <kenf@clark.net>
Message-ID: <glCm5.16181$dC1.17439@dfw-read.news.verio.net>
Source record: 182445

I would like to hope that we can get bipartisan support for this bill,
and also for a bill exempting hams from restrictive covenants and
homeowner's associations.

I also think we should keep political discussion off of this
newsgroups, to prevent needless flame wars, insults, and hurt feelings.

--

==========
Ken Firestone, W3CAT | For every problem there is one solution
ken@firestone.net | which is simple, neat, and wrong.
kenf@clark.net | -- H. L. Mencken
==========

optiscan <wb6shi@arrl.net> wrote:
> JOHN T. DOOLITTLE
> August 07, 2000

> Dear Norman:

> Since experimenters first began charting the newly
> discovered electromagnetic spectrum at the turn of the
> century, Amateur Radio has been a place where the
> capabilities of new electronic circuits and techniques
> have been explored in the American tradition of the
> citizen-scientist. Access to small portions of the
> spectrum has allowed Amateur Radio to nurture
> generations of scientists, broadcast professionals and
> electronics specialists, many of whom play key roles in
> today's telecommunications revolution.
> Even more widely recognized is Amateur Radio's emergency
> and public service capacity. Amateur Radio provides a
> valuable, and sometimes life-saving, public benefit.
> Indeed, as the nation's telecommunication infrastructure
> becomes increasingly complex it also becomes
> increasingly important to have a simple back-up service
> like Amateur Radio available in the event of serious
> disruption.
> Together with my colleagues in the US House of
> Representatives, I have made a move to continue the
> traditional support of the Amateur Radio frequencies
> with HR 783, the Amateur Radio Spectrum Protection Act.
> HR 783 would require the Federal Communications
> Commission to provide equivalent replacement spectrum
> should it ever be necessary to reallocate Amateur Radio

> frequencies for some other purpose.
> As a cosponsor, I aim to further the cause of the
> individual amateur radio operator, keeping HAM
> frequencies from being eclipsed by newer technologies
> well into the 21st century.
> Please feel free to contact my legislative assistant,
> Scott Bryant, if you have any questions or concerns
> related to this legislation or any other issue.
> Sincerely,
> John T. Doolittle
> United States Representative

238. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <399AF2C7.C8CC3D1B@uci.edu>
Source record: 182446

Yuri Blanarovich wrote:
>
> >It isn't on the patent office web site yet but they run a bit behind.
> >The number is about right for the timing. I can't wait until it's
> >posted. I've got the soldering iron all warmed up and traceable
> >field strength measuring equipment ready.
>
> it is posted at IBM site
>
> http://www.patents.ibm.com/details?&pn=US06104349__
>
> Yuri

Granted it's only the abstract, but how could someone get a patent for
tuning an antenna by cutting it's length? Is this a novel concept?

239. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399AF2B1.D3F8B706@hiwaay.net>
Source record: 182447

Mark- dont bother unless you are willing to swear you are NOT posting
from the same account or computer that Chip uses, and that your are NOT
just another name for Chip.
Your credibility is near zero, but clearly on the negative side, like
the gain. Considering the history of inetness in posting under false
pretenses, I dont really know what you could do to gain acceptance.

Bill

Fractenna wrote:

> Sigh.
>
> Let me know when you have the 30M K2 up.
>
> 73,
> Chip N1IR

240. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <6rCm5.2539$M%6.10803@newsfeed.slurp.net>
Source record: 182448

WB6SHI wrote:
"Vote Republican, save your butt."

If you have to vote Republican to save your butt, you are in the same position as recommended to those caught in a thunderstorm. You have your ass pointed at the sky and your head between your knees.

Best regards, Richard Harrison, KB5WZI

A great position for the dumbocrap mule to come along and kick your butt, I'd say.

73, Dave, K3BHJ

241. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399AF543.9E3E5427@hiwaay.net>
Source record: 182449

It's not just the abstract- all 18 claims are there.The only things
missing when I went there last night were the figures. I REALLY want to
see those.

Bill

Jim Kelley wrote:
>
> Yuri Blanarovich wrote:
> >
> > >It isn't on the patent office web site yet but they run a bit behind.
> > >The number is about right for the timing. I can't wait until it's
> > >posted. I've got the soldering iron all warmed up and traceable
> > >field strength measuring equipment ready.
> >
> > it is posted at IBM site
> >
> > http://www.patents.ibm.com/details?&pn=US06104349__
> >
> > Yuri
>
> Granted it's only the abstract, but how could someone get a patent for
> tuning an antenna by cutting it's length? Is this a novel concept?

242. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399AF61D.D26739BF@hiwaay.net>
Source record: 182450

Sorry about that- I really meant "ineptness", as I'm sure you realized.
I dont have all the use of the muscles in my right hand. (Sure killed
all hopes of a concert career).

Bill

Bill Aycock wrote:

> Considering the history of inetness in posting under false
> pretenses, I dont really know what you could do to gain acceptance.
>
> Bill
>

243. YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: KC8LVJ <rjc100@attglobal.net>
Message-ID: <399B239E.6D16@attglobal.net>
Source record: 182451

I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
the 6 Meter has a 6 foot beam. tower is 48 ft tall.
Question: what should be minimum spacing between the two to avoid
conflict?????

THANKS

244. Re: EZNEC Q?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399AFA75.B8E624B7@cac.net>
Source record: 182452

Roy Lewallen wrote:

> Yuri Blanarovich wrote:
> >
> > I am plunging into intricacies of antenna modeling using EZNEC.
> > Have some questions:
> >
> > 1. I see that metric formula for wavelength is not 300/f as we used to use.
> > What is the reason for 298 something, air dielectric? More precise speed of
> > light/RF?
>
> EZNEC uses 299792500 m/sec as the speed of light. This is correct to
> seven decimal digits, according to the _Handbook of Chemistry and
> Physics_. 300 million is just fine, but the more precise value is no
> problem for the program.
>
> > 2. When modeling quad loops, what are the recommended segment length in the
> > vicinity of the corners? I understand that programs are having problems with
> > sharp wire corners. Say recommendation for 15m loop.
>
> Six segments per side is plenty, and you can get good results with even
> fewer. There's no special requirement for short segments near the
> corners. This was a problem with MININEC-based programs, but NEC-2,
> which EZNEC uses, doesn't have this problem.
>
> > 3. Resultant pattern plots, are they containing both polarizations, or is there
> > way to see each polarization separately?
>
> You can have the program show you H, V, and total separately, or just
> total. In the Control Center, open the Plot menu and choose 2D Fields to
> Plot.
>
> > 4. With windows version, is it possible in the near fututre to see results of
> > wire manipulation by mouse on the SWR and pattern plots? It would be really
> > neat for optimization exercises.
>
> Do you mean, could you move a wire with the mouse, and immediately see
> the SWR or pattern plot change? No, not in the near future.
>
> Roy Lewallen, W7EL

Roy:

I just wanted to say thanks for all the hard work you put into this program. I'm learning the intricacies of it still, but it's one heck of a way to design an

antenna.

73's

-SSB

245. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Tim Moore <Tim@TM52.com>
Message-ID: <399AFA7C.AB4B73F4@TM52.com>
Source record: 182453

I doubt that the FCC has any control over covenants and restrictions. It would take a court suit to even find out for "sure".

Tim KG4JAR

Bill Nelson wrote:

> sideband <sideband@cac.net> wrote:
>
> :> Please help! I live in an area in San Diego where we have extremely
> :> restrictive CC&R's. Am getting back into amateur radio after an absence
>
> If I recall correctly, the FCC has stated that the CC&Rs cannot prohibit
> amateur antennas.
>
> --
> Bill Nelson (billn@peak.org)

--
Tim Moore
Transmitting to you "Live" from Fredericksburg, VA
tim@tm52.com

246. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399AFD21.37620F64@cac.net>
Source record: 182454

Bill Aycock wrote:

> Sorry about that- I really meant "ineptness", as I'm sure you realized.
> I dont have all the use of the muscles in my right hand. (Sure killed
> all hopes of a concert career).
>
> Bill
>
> Bill Aycock wrote:
>
> > Considering the history of inetness in posting under false
> > pretenses, I dont really know what you could do to gain acceptance.
> >
> > Bill
> >

Bill:

If its any consolation, I know exactly how you feel. I used to play guitar... an accident at work, severing several tendons, ended that idea.

I used to drive a truck, that's overwith now, too, due to a drunk driver.

I hope your hand doesn't pain you.

73's

-SSB

247. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Pete <Pete@xyz.com>
Message-ID: <zeDm5.3673$ZI2.89462@news1.rdc1.il.home.com>
Source record: 182455

Slick Willy "The dirty draft dodger" takes credit for the good economy. He thinks the democrats are responsible for it. They controlled Congress for 40 years and the economy floundered, then the Republicans took control of congress and everything skyrocketed. The democrats just won't give what started under Reagan, continued building during Bush's term, and really took off when the Republican's took control of congress any credit, - and Slick Willy takes credit for it. The democrats say the budget deficit quadrupled under Reagan and I say it costs a lot of money to win the Cold war. It didn't come cheap. It was well worth the money it costs.
We Americans have no choice but to vote for a Republican President. No democrat can put up a valid argument against voting for Bush!

"David J. Windisch" <davidw@copper.net> wrote in message
news:6rCm5.2539$M%6.10803@newsfeed.slurp.net...
> WB6SHI wrote:
> "Vote Republican, save your butt."
>
> If you have to vote Republican to save your butt, you are in the same
> position as recommended to those caught in a thunderstorm. You have your
> ass pointed at the sky and your head between your knees.
>
> Best regards, Richard Harrison, KB5WZI
>
>
> A great position for the dumbocrap mule to come along and kick your butt,
> I'd say.
>
> 73, Dave, K3BHJ
>
>
>

248. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399B0423.8338BBEC@bellatlantic.net>
Source record: 182456
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

No, you are not being bothersome. But you
got a lot of answers including some bad
information which could lead you astray.

If all you want is to put up a simple antenna
that works, and are not into designing the
the very best antenna you can, then build
a dipole. Determine the length of the elements
(2 pieces of wire) by the formula :
495/frequency where frequency is the frequency
you want the antenna to work best on and is
expressed in mhz (megahertz), and the result
of the computation is feet. For example, at
28 mhz, the result would be about 16.6 feet.
Divide that by two to get the element lengths.
You would need two elements 8.3 feet long. That
will give you a good starting point somewhere
near 50 ohms impedance at 28 mhz. You can then use
an swr meter and adjust the element lengths
for the best match as indicated by the meter.
You must shorten (or lengthen) an equal amount from each
leg of the dipole. You make your swr measurement
with the antenna installed, then lower it, shorten say
1/2 inch from each end. You raise the antenna back
to its proper height and measure the swr again. You
repeat the process of lowereing, shortening, raising and
measuring until you are satisfied that you've got a low
enough swr. If you find that shortening the elements
raises the swr, then lengthen them instead.

The exact impedance of your dipole will depend
on surrounding conditions, how close it is to
the ground and so forth, so the use of the formula
is only to get you in the ballpark.

Now, the rest of my answer will be in response
to your post, and will be somewhat harsh.

sideband wrote:

> Uh, whoa... inductor? Grid? Huh?
>
> I was hoping to be able to figure out, in advance, how long I'd have to make the
> two wire halves of a verticle dipole, cut those wires, attach them to a block of
> some sort, feed the coax, throw it up in the air, check the SWR's, tune it and

> go....
>

You already know that stuff. You posted it in your first post.
Your first post indicates you are looking for an optimum
design, not the soft bullshit you posted above. If you
want to optimize you gotta learn. You also indicated
you are envisioning running a 200 watt amplifier. "Serious
overbuilding" you called it.

> Now I need to build a gamma match or something similar to get this thing to work?
> I had always heard that the beauty of a Dipole was its simplicity...

If you want advice, then spend some time reading it properly.

> So now I need to ask a bunch of questions, because (and yes, I'll come right out
> and say it) I'm ignorant where these things are concerned..

No problem when you don't know, and no problem when
you ask

> I'm a person of meager means. I can only work 4 hours a day (not by choice), so
> this dipole project, which will probably exhaust me when I put it up in the air,
> was conceived to both save me a few dollars, let me talk on the CB farther than
> the four miles I get out now, and get me some limited exercise.

Build the 1/2 wave dipole you mentioned in your first post, and that I
outlined above and that has been explained in other posts. Undertsand
that we cannot optomize it for you to exact dimensions, which will
depend in part on the environment where it is installed.

> 1. How do I measure the resistance, inductance, and/or reactance at the feed
> point of a dipole? I have access to a relatively decent DVOM (if Fluke is
> decent), an SWR meter, and that's it...

You don't. But my post was prompted in response to a post
that told you that you measured impedance with an swr meter.
I corrected that so that you would not be mislead.

>
> 2. Will I need a degree in Electrical Engineering to, once I've figured the above
> out, design and build this matching bridge/gate/whatever? I'm pretty handy with a
> soldering iron, and I do understand basic DC and AC electronics, (heck, I've even
> added my own little twist to the clarifier mod in the GrantXL/148/2000 that works
> VERY well), but I've never done anything such as this before, dealing with things
> I cannot directly measure. New ground for me.

If you build a 1/2 wave dipole as described and feed it with 50
ohm coax, you will not need a matching network. You will
adjust the length of the elements for the best match.

>
> 3. Would it be simpler to design an antenna that had 50 ohms resistance in the
> first place, without the reactance/inductance, or would it be simpler just to

> make up the difference once an "efficient" design was created?

Yes/no/maybe - depends on what it is you have in mind. If all you
want is simple, go with the dipole. If you want distance and all
other factors are secondary, go with a beam, or a quad, or whatever -
but you have to be able to choose between the tradeoffs. That's
what engineering is all about - creating the best design for a given
set of circumstances.

> I know, I'm being bothersome, and for that, I do apologise. I'm just trying to
> understand and learn new things.

Again, it's not bothersome. But expect to do some work in
reading and trying to understand the answers. And understand
that you set a real bad tone from the outset with your mention
of the 200 watts for a CB antenna. Hams love to help others,
as a general rule, but not to help in illegal activity. 200 watts
on CB is illegal, and, frankly, pisses a lot of us off. You
already received some replies where that is evident.

200 watts is legal on the ham bands, and we regularly
talk all over the world. There is no legal restriction
on you becoming a ham in the USA (I'm assuming
that's where you live). Yes - you have to work for
the license. That's one of those "engineering" choices:
am I content with CB and its limited range, power
limit and bandwidth, or am I willing to work for
the latitude that ham radio would allow?

Nothing wrong with being content with CB.
But your expectation of posting a question
here, which happens to reference the
inclusion of possible illegal activity, and receiving
a single, well informed and crystal clear set
of instructions to enable you to do what you
want is unrealistic. Those of us who have answered
have, for the most part, tried to be helpful. In
return, do us, and yourself, the courtesy of reading
what was said carefully.

>
>
> TIA, and 73's
>
> -SSB

249. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4149-399AFD70-75@storefull-113.iap.bryant.webtv.net>
Source record: 182457

Klein, WT6G wrote:
"Why don`t the Ufer grounding systems explode when struck?"

Ufer grounding systems are susceptible to exploding if in harms way and exposed to the extent that a tower base is to lightning, but does have an advantage. A reinforced concrete slab is usually a larger surface in contact with the soil and thus has a lower current density. The Ufer can be a good r-f ground, and a good safety ground.

There are safety grounds which prevent shock at power frequencies. There are r-f grounds to complete radio circuits. There are grounds to complete the lightning discharge path. Only the lightning ground must handle enormous currents.

Would I tie together footing rebar? You betcha. I always have, and I`ve supervised contless tower constructions. It would be fruitless to try to insulate rebars and extravagant to insulate towers from their bases if they did not require base insulators to function.

No need for confusion. Ufers are good safety grounds and can be good r-f grounds. They sure can avoid static electrical build up in a grain elevator or powder magazine. You may connect your a-c, r-f, and other grounds to the slab reinforcing bars in your house, but regulations require you to also have a connection to a continuous metallic water supply system or ground rod(s). Regulations require you to interconnect all grounds including tower grounds, and to keep the tower bases from exploding, it`s a good idea to have each tower leg attached by a low impedance connection to its own ground rod.

Best regarfs, Richard Harrison, KB5WZI

250. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <399B0A2E.ECB7FBBE@rica.net>
Source record: 182458
Cross-posted to: alt.engineering.electrical,alt.comp.hardware.homebuilt,rec.radio.amateur.antenna,sci.electronics.basics

Klein Gilhousen wrote:
>
> I'm a little confused about something. I thought I had heard stories
> about grounding arrangements for towers that could result in the
> concrete in the footing "exploding" when the tower is hit by
> lightning. What would cause this if concrete and rebar is a good
> ground? What should you do (and not do) in construction of the
> footing to avoid this kind of catastropic distruction of the footing?
> Or am I just totally confused?

A good ground in this sense is not necessarily a right ground, but
just a low resistance ground. However, current flowing through that
resistance will still produce heat, and enough current for a long
enough time will produce destructive effects. The big problem occurs
when there is little rebar and lots of current. That is why it is so
important that all the rebar be well connected electrically before
being embedded, and that there be enough of it. And even if you don't
connect your rebar to the tower, if your ground is not low enough
resistance, there may still be destructive currents from the tower
steel through the concrete even with the rebar floating. The moral of
the story is that you can always add safety factor by providing more
paths to Earth to divide the current, and thus spread the heat around
while reducing the total heat produced.

--
John Popelish

251. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <10030-399B0B3B-70@storefull-115.iap.bryant.webtv.net>
Source record: 182459

Roy Lewallen wrote:
"It sounds to me as if two different things are being compared here."

At least!

Reactance prevents an in-phase relationship between voltage and current in a circuit. It also changes the impedance of a circuit. More impedance if inductance and resistance are in series, less if they are in parallel.

The phase angle is given as the angle whose tangent is X over R.

The impedance magnitude of of a series circuit is the square root of R squared plus X squared.

A simple example: 10 ohms resistance in series with 10 ohms reactance.

Tangent is 10 over 10 equals one, and the angle is 45 degrees.

Impedance is the square root of 200 and equals 14.142 ohms.

Note that the current will lag or lead the voltage in the circuit by 45 degrees depending on whether the reactance was inductive or capacitive.

The point is this circuit with only two external terminals does NOT have a voltage drop which is in-phase with the current through the circuit. Every pure resistance does have its voltage drop exactly in-phase with the current through that resistance, regardless of phase relationships in the overall circuit.

Best regards, Richard Harrison, KB5WZI

252. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Andy Dingley <dingbat@codesmiths.com>
Message-ID: <de3mpso0h51gou5kg9qv2mdvcfpgml2abr@4ax.com>
Source record: 182460
Cross-posted to: alt.comp.hardware.homebuilt,alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.basics,sci.engr.safety,sci.geo.meteorology

Richard Currin <Richard_Currin@ncsu.edu> a ï¿½crit :

>We have had several
>pieces of equipment damaged by lightning that were "protected" by APC.

I had an APC whose charger went crazy and the resulting spill of
boiled-off acid took a hole out of the office carpet ! Monday morning
we'd lost the server, and we hadn't even had power problems.

APC were of no use whatsoever when we complained -- it's the last one
of theirs that I'll buy.

253. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <399B1207.D3C83631@uci.edu>
Source record: 182461

Bill Aycock wrote:

> It's not just the abstract- all 18 claims are there.The only things
> missing when I went there last night were the figures. I REALLY want to
> see those.

> Bill

> Jim Kelley wrote:
> > Granted it's only the abstract, but how could someone get a patent for
> > tuning an antenna by cutting it's length? Is this a novel concept?

Roger, Bill. I read further. Looks like the claims cover general arrangements of multiple fractal shaped antenna elements. The abstract and title don't seem to correlate very well to the claims. Somebody already mentioned that. Haven't seen the specification yet.

Bullets in the first claim. I thought that was cute. ;-)

73, ac6xg

254. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399AFDAF.266E@pacbell.net>
Source record: 182462

Roy Lewallen wrote:
>
> It sounds to me like two different things are being compared here. The
> currents at the two terminals of a capacitor are in phase. The currents
> at the two terminals of an inductor are in phase. Neither will produce a
> phase shift in the current from input to output. No two-terminal device
> (of zero length) can -- it violates Kirchoff's law.
>
> Roy Lewallen, W7EL
>
> Richard Harrison wrote:
> >
> > Bart, WB6HQK wrote:
> > "If two currents are always identical, how can any phase shift be
> > introduced by a two terminal device?"
> >
> > No need to complicate with energy storage, instant versus effective,
> > etc.. Two examples most will instantly recognize: pure L and pure C.
> > Either has orly two terminals and produces 90 degrees of phase shift
> > between current and voltage.
> >
> > Best regards, Richard Harrison, KB5WZI

Maybe someone would like to comment on the case of two harmonic
oscillators
coupled with a capacitance. If the capacitance is large enough
(the coupling between the oscillators is great enough) the system
will have two resonances, one where the currents through
the oscillators go in the same direction,
(and the voltages across the capacitor are 180 degrees out of phase)
and one where the currents are 180 degrees out of phase (and the
voltages across the capacitor are in phase and equal).
Maybe one of you can express this better than I can, but the
phenomenon is dealt with in most undergraduate physics books.

Tom Donaly KA6RUH

255. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399B167F.B6119727@eznec.com>
Source record: 182463

I just did some quick EZNEC modeling of a simple collinear. The lower element is 19.3 inches high, #12 wire. The second element begins 0.2 inches above it, and is 38.6 inches long, also #12. The frequency is 146 MHz, and perfect ground was used. The source is at the base of the lower element. As a first test, I put a second source at the center of the upper element, in phase with lower source (both are current sources). The result is a very nice pattern directed at the horizon, 8.14 dBi, with a couple of small (-20 dB) higher lobes. Next I removed the second source. This represents a two element setup with an insulator between elements. The resulting pattern is maximum at 45 degrees above the horizon, and 5.08 dBi at that angle. The gain at the horizon is 2.98 dBi, about 2 dB less than just the quarter wave element alone. So someone trying this would probably conclude that it "works", since its performance would be roughly comparable to a quarter wave whip.

Next I put a perfect, non-radiating 90 degree shorted stub between the elements. In EZNEC, this is done by adding a wire between them and putting the stub (a transmission line model) on the wire. This stub model is a true two-terminal device, since it has no common-mode current and therefore doesn't radiate or couple to the antenna. The current into one terminal is exactly the same as the current out of the other terminal. The resulting pattern is just about identical to the insulator model. This shouldn't be a surprise, since this perfect shorted 90 degree stub looks just like an open circuit across the two input terminals. A lossless resonant circuit (which is a two-terminal device with terminal characteristics exactly the same as the idealized stub) would show the same result, although it wasn't modeled.

Finally, I made a horizontal quarter wave stub using wires and put it between the elements. The stub was 20.2 inches long, 0.2 inch spacing, #12 wires. The main lobes of the resulting pattern were nearly identical to the two-source model, just 0.2 dB less in field strength. There's a very noticeable upper lobe, at about 60 degrees elevation, about 14 dB below the main lobes. This is due to radiation from the quarter wave stub. Investigation of the currents show that, unlike the non-radiating transmission line stub, the currents at the two terminals of the wire stub aren't equal in magnitude, and they're not completely out of phase. This holds true for the currents on the two stub wires for the whole length of the stub. That is, there's a common mode current along the stub.

The modeling supports what Bart has been saying: that the phasing network has to have common mode current to work. A wire stub will work because it supports this current, but a physically small lumped network (including a compacted transmission line stub) won't.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Tom, W8JI wrote:
> "There is absolutely no way a resonant circuit can work."
>
> A 1/4-wave shorted stub is a resonant circuit with only two terminals
> and it does work.
>
> My old Radio Handbook, ARRL Antenna Book, and many other publications
> have examples. Many have been published continuously during the past 50
> years. Had they not worked, publication of these examples in respected
> issues would have subsided.
>
> Best regards, Richard Harrison, KB5WZI

256. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399B17F0.9EC60D2A@usa.alcatel.com>
Source record: 182464

Richard,

Look at what Tom is saying. He says, a lumped constant tank can only work as the 180 degree phasing element in a collinear if it has a third terminal. Similar to baluns that need a center tap, I think. In the case of a stub, that's provided by the low impedance it has to common-mode current flow. In the case of a tank coil and cap it can be done with a quarter wave wire.

He may be the only one of us who's TRIED it. Of course, now the rest of us have to try it to see for ourselves (grin) but I think I'll do MINE at 440 or 1.2. I do know that a stub can be coiled into a circle and still work - I copied the ARRL's 3.4 wave 2-meter mobile collinear in 1970. Never DID try a resonant tank. Now I shall have to.

Earlier, Tom answered how he knows. He was asked
==========
>>OK...the discussions I've seen here (and been a part of) have offered
>>various explanations about what's going on, or what people think is
>>going on. (Or what people know MUST be going on! :-) How about some
>>_measurements_? HOW do you know that the quarter wave stub worked? HOW
>>does W8JI know that a coil with a perpendiular quarter wave wire
>>attached to its center tap works, but that the same antenna minus the
>>quarter wave wire does not give the desired collinear results?

And he answered,

>Because I built one, about 25 years ago.

>It was part of a phase I went through, when I was trying to use the
>300 feet of space between a couple big Cottonwood trees over a clear
>field for 40 meter and 80 meter systems.
==========

Cortland
(ka5s@saber.net)

257. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399B1986.B1C7A0F4@usa.alcatel.com>
Source record: 182465

I think that's his point. FIRST, he says you can't GET 180 degrees out of a 2-terminal device. THEN he says the third terminal is provided in a stub by its low common-mode impedance. IOW, a stub isn't really a two-terminal device at resonance.

This has some interesting consequences. A _wire_ is a 2-terminal device, if it doesn't radiate.

Cortland
(kas@saber.net)

Bart Rowlett wrote:

> If the two currents are always identical, how can any phase shift be
> introduced by a two terminal device?
>
> bart
> wb6hqk

258. ON4UN project...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <x1Fm5.30$qf%1.1114142@news.jazztel.es>
Source record: 182466

First of all, greetings from a new newsgroup user!

I am reading the ON4UN book, and I've been thinking about building one antenna for 160 and 80 he mentions on the book.

The antenna would be 27 meters tall, and its four *ELEVATED* radials would measure 27 meters too. The antenna would be made of 2 mm wire, and, as indicated at the book, will not have anything but the vertical element and the four radials.

For 80 meters, the system 60 degrees long, so it would be short by 120 degrees for 1/2 wavelenght. Too short -> put a capacitor, please!

For 160 meters, it would be 30 degrees long, so being short of 150 degrees for 1/2 wavelenght. Too short -> put a bigger coil!

The questions are simple... how could I calculate the right values for the capacitor and the coil needed to put the system to matched impedance?

Thanks in advance, and 73!

259. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399B2380.B9D94ADA@eznec.com>
Source record: 182467

Cortland Richmond wrote:
>
> Richard,
>
> Look at what Tom is saying. He says, a lumped constant tank can only work
> as the 180 degree phasing element in a collinear if it has a third
> terminal. Similar to baluns that need a center tap, I think. In the case of
> a stub, that's provided by the low impedance it has to common-mode current
> flow. In the case of a tank coil and cap it can be done with a quarter wave
> wire.
>
> He may be the only one of us who's TRIED it. Of course, now the rest of us
> have to try it to see for ourselves (grin) but I think I'll do MINE at 440
> or 1.2. I do know that a stub can be coiled into a circle and still work -
> I copied the ARRL's 3.4 wave 2-meter mobile collinear in 1970. Never DID
> try a resonant tank. Now I shall have to.
> . . .

When you do, be sure and be careful how you determine that it "works".
There's substantial current in the upper element even if there's no
connection between elements, but the pattern and gain are quite
different than they are when the antenna is working properly.

Roy Lewallen, W7EL

260. Re: YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <8nf88spoj1@mark.ucdavis.edu>
Source record: 182468

```
: KC8LVJ <rjc100@attglobal.net> wrote:
: I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
: the 6 Meter has a 6 foot beam. tower is 48 ft tall.
: Question: what should be minimum spacing between the two to avoid
: conflict?????
: THANKS

1/4 wave length
skipp
```

261. Re: EZNEC Q?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000816195237.17998.00000092@ng-ba1.aol.com>
Source record: 182519

>
>Do you mean, could you move a wire with the mouse, and immediately see
>the SWR or pattern plot change? No, not in the near future.
>
>Roy Lewallen, W7EL
>
>

yes :-(

Thanks for the answers, I see the H and V options for plots. Super!
Thanks for windowing Eznec, looks like neat tool that should save a lot of fooling around with hardware.

73 Yuri

262. Code practice on the web.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Brad <bdstrau@attglobal.net>
Message-ID: <399b2d01_2@news1.prserv.net>
Source record: 182520

```
Code practice on the web.

http://www.morse101.com
```

263. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399B3B60.9563C747@hiwaay.net>
Source record: 182521

The part about the concert career is a joke- but- the muscles in the right hand are not. I had injury to the Ulnar, Median and Radial nerves, and have lost feeling on the outer part of the hand, and almost all lateral motion (Atrophy of the interossii muscles). The grip is OK (those muscles are in the forearm). I tend to stutter on even an automatic key-HI.

Bill-W4BSG

sideband wrote:
>
> Bill Aycock wrote:
>
> > Sorry about that- I really meant "ineptness", as I'm sure you realized.
> > I dont have all the use of the muscles in my right hand. (Sure killed
> > all hopes of a concert career).
> >
> > Bill
> >
> > Bill Aycock wrote:
> >
> > > Considering the history of inetness in posting under false
> > > pretenses, I dont really know what you could do to gain acceptance.
> > >
> > > Bill
> > >
>
> Bill:
>
> If its any consolation, I know exactly how you feel. I used to play
> guitar... an accident at work, severing several tendons, ended that idea.
>
> I used to drive a truck, that's overwith now, too, due to a drunk driver.
>
> I hope your hand doesn't pain you.
>
> 73's
>
> -SSB

264. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399B3EB0.9CD0A63A@usa.alcatel.com>
Source record: 182522

Ask the Patent Examiner. If someone can patent the pi-network, I guess
someone can patent antenna trimming.

Cortland
(ka5s@saber.net)

Jim Kelley wrote:

> Granted it's only the abstract, but how could someone get a patent for
> tuning an antenna by cutting it's length? Is this a novel concept?

265. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <399B4CBC.695C50B9@west.raytheon.com>
Source record: 182523

Cortland Richmond wrote:
>
> I think that's his point. FIRST, he says you can't GET 180 degrees out of a
> 2-terminal device. THEN he says the third terminal is provided in a stub by
> its low common-mode impedance. IOW, a stub isn't really a two-terminal
> device at resonance.

Exactly!
>
> This has some interesting consequences. A _wire_ is a 2-terminal device, if
> it doesn't radiate.

I think it's more like: A _wire_ is a 2-terminal device, if it CAN'T
radiate.
It's a bit of a chicken and the egg problem and probably not worth
worrying about however.

Consider what happens if you add another 1/4 wl stub in parallel with
the first one. Orientate it so that the two stubs are radially
symmetric and perpendicular to the dipole elements. The 'third
terminal' current will now be shared between the two stubs and phased
such that the resulting radiation (from the common mode) will be
greatly reduced. In addition, the common mode impedance will be
dramatically reduced from the original 36 ohms (approx.) down to a few
ohms or less. The broadside radiation will be improved due to the
reduction in the high angle minor lobe (previously from the single
stub) and the improved current balance between the dipole elements
which result from the better 'center tap' action of the phase
inverter.

Further adjustment of the stub wire diameters and lengths can be used
to optimize phasing and radiator current sharing.

bart
wb6hqk

266. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: "Steve Yates, AA5TB" <aa5tb@swbell.net>
Message-ID: <JKIm5.889$Wv6.77982@nnrp1.sbc.net>
Source record: 182524

The site is still under construction but you may find the following site
useful:

http://www.geocities.com/aa5tb/efha.html

73,
Steve Yates - AA5TB
Fort Worth, TX - EM12gs
http://www.geocities.com/aa5tb/

"I would like info on making an end feed dipole or similier antenna. If
possible mail to redberd95@aol.com

Randy KA4NMA"

267. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399B5C7C.502C44B2@cac.net>
Source record: 182525
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

ehsjr@bellatlantic.net wrote:

> No, you are not being bothersome. But you
> got a lot of answers including some bad
> information which could lead you astray.
>
> If all you want is to put up a simple antenna
> that works, and are not into designing the
> the very best antenna you can, then build
> a dipole. Determine the length of the elements
> (2 pieces of wire) by the formula :
> 495/frequency where frequency is the frequency
> you want the antenna to work best on and is
> expressed in mhz (megahertz), and the result
> of the computation is feet. For example, at
> 28 mhz, the result would be about 16.6 feet.
> Divide that by two to get the element lengths.
> You would need two elements 8.3 feet long. That
> will give you a good starting point somewhere
> near 50 ohms impedance at 28 mhz. You can then use
> an swr meter and adjust the element lengths
> for the best match as indicated by the meter.
> You must shorten (or lengthen) an equal amount from each
> leg of the dipole. You make your swr measurement
> with the antenna installed, then lower it, shorten say
> 1/2 inch from each end. You raise the antenna back
> to its proper height and measure the swr again. You
> repeat the process of lowereing, shortening, raising and
> measuring until you are satisfied that you've got a low
> enough swr. If you find that shortening the elements
> raises the swr, then lengthen them instead.
>
> The exact impedance of your dipole will depend
> on surrounding conditions, how close it is to
> the ground and so forth, so the use of the formula
> is only to get you in the ballpark.
>
> Now, the rest of my answer will be in response
> to your post, and will be somewhat harsh.
>
> sideband wrote:
>
> > Uh, whoa... inductor? Grid? Huh?

> >
> > I was hoping to be able to figure out, in advance, how long I'd have to make the
> > two wire halves of a verticle dipole, cut those wires, attach them to a block of
> > some sort, feed the coax, throw it up in the air, check the SWR's, tune it and
> > go....
> >
>
> You already know that stuff. You posted it in your first post.
> Your first post indicates you are looking for an optimum
> design, not the soft bullshit you posted above. If you
> want to optimize you gotta learn. You also indicated
> you are envisioning running a 200 watt amplifier. "Serious
> overbuilding" you called it.
>
> > Now I need to build a gamma match or something similar to get this thing to work?
> > I had always heard that the beauty of a Dipole was its simplicity...
>
> If you want advice, then spend some time reading it properly.
>
> > So now I need to ask a bunch of questions, because (and yes, I'll come right out
> > and say it) I'm ignorant where these things are concerned..
>
> No problem when you don't know, and no problem when
> you ask
>
> > I'm a person of meager means. I can only work 4 hours a day (not by choice), so
> > this dipole project, which will probably exhaust me when I put it up in the air,
> > was conceived to both save me a few dollars, let me talk on the CB farther than
> > the four miles I get out now, and get me some limited exercise.
>
> Build the 1/2 wave dipole you mentioned in your first post, and that I
> outlined above and that has been explained in other posts. Undertsand
> that we cannot optomize it for you to exact dimensions, which will
> depend in part on the environment where it is installed.
>
> > 1. How do I measure the resistance, inductance, and/or reactance at the feed
> > point of a dipole? I have access to a relatively decent DVOM (if Fluke is
> > decent), an SWR meter, and that's it...
>
> You don't. But my post was prompted in response to a post
> that told you that you measured impedance with an swr meter.
> I corrected that so that you would not be mislead.
>
> >
> > 2. Will I need a degree in Electrical Engineering to, once I've figured the above
> > out, design and build this matching bridge/gate/whatever? I'm pretty handy with a
> > soldering iron, and I do understand basic DC and AC electronics, (heck, I've even
> > added my own little twist to the clarifier mod in the GrantXL/148/2000 that works
> > VERY well), but I've never done anything such as this before, dealing with things
> > I cannot directly measure. New ground for me.

>
> If you build a 1/2 wave dipole as described and feed it with 50
> ohm coax, you will not need a matching network. You will
> adjust the length of the elements for the best match.
>
> >
> > 3. Would it be simpler to design an antenna that had 50 ohms resistance in the
> > first place, without the reactance/inductance, or would it be simpler just to
> > make up the difference once an "efficient" design was created?
>
> Yes/no/maybe - depends on what it is you have in mind. If all you
> want is simple, go with the dipole. If you want distance and all
> other factors are secondary, go with a beam, or a quad, or whatever -
> but you have to be able to choose between the tradeoffs. That's
> what engineering is all about - creating the best design for a given
> set of circumstances.
>
> > I know, I'm being bothersome, and for that, I do apologise. I'm just trying to
> > understand and learn new things.
>
> Again, it's not bothersome. But expect to do some work in
> reading and trying to understand the answers. And understand
> that you set a real bad tone from the outset with your mention
> of the 200 watts for a CB antenna. Hams love to help others,
> as a general rule, but not to help in illegal activity. 200 watts
> on CB is illegal, and, frankly, pisses a lot of us off. You
> already received some replies where that is evident.
>
> 200 watts is legal on the ham bands, and we regularly
> talk all over the world. There is no legal restriction
> on you becoming a ham in the USA (I'm assuming
> that's where you live). Yes - you have to work for
> the license. That's one of those "engineering" choices:
> am I content with CB and its limited range, power
> limit and bandwidth, or am I willing to work for
> the latitude that ham radio would allow?
>
> Nothing wrong with being content with CB.
> But your expectation of posting a question
> here, which happens to reference the
> inclusion of possible illegal activity, and receiving
> a single, well informed and crystal clear set
> of instructions to enable you to do what you
> want is unrealistic. Those of us who have answered
> have, for the most part, tried to be helpful. In
> return, do us, and yourself, the courtesy of reading
> what was said carefully.
>
> >
> >

> > TIA, and 73's
> >
> > -SSB

Well, I also stated in my post that I wasn't a HAM, yet... I am studying to get my ticket, and I was hoping to build this antenna so that, with minor modifications, it would work on 10 meters when I was done with it. In this way, I hope to avoid a major rebuild of the antenna when the ticket does come... I'm not running power on the base station now... I think my neighbors would get annoyed with the bleedover into their TV sets in the apartment building.

I'm trying to build the best dipole antenna I can, that will radiate as efficiently as it can, and do it once. After the accident, I don't move around as well as I used to, so I had wanted to be able to build something that would last me a very long time, be stable, and would be able to be improved when my needs change (read: when I get my HAM licence).

I hope this confusion hasn't put many people off. I didn't intend for that to happen. I was planning on overbuilding so the antenna would be able to change with my needs without massive re-working.

-SSB

268. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399B5E8D.963A257D@eznec.com>
Source record: 182526
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

That makes a total of two rigs I know of which have 6 dB per S-Unit. Someone else reported the Kachina to have S-Units of this size. All other rigs I've measured, and which I've gotten reports on, have had S-units of a maximum of 5 dB (typical for some Kenwoods), and somewhat less to much less for other rigs like my Icom. The S meter typically indicates the AGC voltage, which is a more-or-less logarithmic function of the signal strength. A lot of rigs are set up for 50 microvolts for S-9, but that's a simple, one-point adjustment, and has nothing to do with the scale sensitivity and linearity. Reg's rig is the only one I've heard of which actually has an adjustment for the S meter sensitivity, and I have no idea how it's made to be constant over the scale. Unfortunately, Reg has apparently never actually measured his to ascertain whether it's adjusted correctly, or whether it's linear. (Or at least, he's never shared his measurement results with us.) There also seems to be something regional about this -- apparently only the Japanese rigs shipped to the U.K. have this adjustment, but not the ones sent to the U.S. Or maybe only the U.K. ones are adjusted properly -- this isn't entirely clear to me. It is clear, though, that meters which have never been measured are always perfectly accurate.

Thanks for the posting -- I'll add yours to the short list of rigs which actually have a 6 dB per S unit meter. You, and the Kachina users, can interpret the S unit as used by most popular writers to the marks on your meter scale. The rest of us can be seriously in error if we do that.

Roy Lewallen, W7EL

ehsjr@bellatlantic.net wrote:
>
> Roy,
>
> Well, I've measured my S meter's accuracy, and it is
> exaqctly as Reg described. This was on a cheap
> Uniden - the "President" model which also goes
> by model number 2510. It is a 10 meter all mode
> radio, used as the IF for a 6 meter transverter.
> I measured it because the transverter seemed to
> hear very poorly. Any way, it was exactly on,
> yet the setup was still deaf. I got to questioning the
> accuracy of my signal generator - an HP 608 D.
> So I brought the setup to a friends house, and he
> measured it with his test equipment - it was spot on.
> But there was a major difference - when we hooked

> the transverter to his antenna, all of a sudden I could
> hear 6 meter signals. 6 antennas later, I'm still
> fairly deaf at my qth - but the rig works.
>
> My guess is that most new radios are fairly accurate -
> when the s-meter shows S-9 you've got close to
> 100 microvolts. I expect accuracy drops off the farther
> away from S-9 you get. My Uniden was pretty good
> down to S 3 or S 4 - I don't remember which.
> When I get a few projects out of the way, I'll drag
> my 746 over to the generator and see how accurate
> it's " s-meter " is. (Not a meter at all - a horizontal
> bar graph on the LCD display). The same ham who
> performed the second test on my Uniden - he also
> uses an HP 608 D - tested his 756 and found it was
> slightly off in the wattmeter. I do not remember whether
> he tested the S meter, but my bet is he did. He is quite
> meticulous about those things. If he did test it, he would
> surely have told me if the S-meter was off. I'll have to ask
> him. Or, if you work him, you can ask him yourself.
> His call is WA2WEJ
>
> Roy Lewallen wrote:
>
> > Ah, Reg, you never disappoint me. Theory is always so much tidier when
> > not sullied by those annoying measurements. As long as we never actually
> > measure our S-meters, we can remain steadfast in our certainty of their
> > precision. Exept for American S-meters, of course.
> >
> > Roy Lewallen, W7EL

269. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Rosco <rvaagen@hotmail.com>
Message-ID: <spmndil3r5j90@corp.supernews.com>
Source record: 182527
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Will <wcwhite@mindspring.com> wrote in message
news:399A1059.89EF2FED@mindspring.com...
> Using a relative field strength meter in conjunction with an SWR meter
> is a useful approach. Often, you can obtain the same low SWR reading
> using very different settings of the inductors and capacitors in a
> matching network, yet one of these will almost always yield by far the
> highest field strength. It is instructive also that sometimes your tuner
> acts like little more than a dummy load. On 40 and 15 I peg my FS meter,
> with its sensitivity turned all the way down. On 80, with the sens.
> control full CW, I can barely budge the needle no matter what I do. If I
> relied only on the SWR meter, my feelings might be hurt that no one
> answers my calls on 80 :)

Wonder if you could change a component in your fs meter to work better on 80
meters also? Circuit is probably acting like a hi pass network......

How about remote mounting the antenna for the field strength meter outside
and monitoring it from the shack?

DT-001

>
> de Will KD7BFX
>
> WildBill wrote:
> >
> > So your saying that tuning an antenna with a swr meter is wrong ..max
field
> > strength does not guarantee lowest swr .. how can you go wrong by
tuningan
> > antenna for lowest swr
> >
> > > For example, some antennas are actually close to 30 ohms at resonance.
You
> > > will radiate more power if the antenna is tuned for a SWR of close to
2:1,
> > > NOT 1:1. The problem is figuring out if that impedance is around 30
ohms
> > > or around 100 ohms - using just a SWR meter.
> >
> > >
> > > That is why it is recommended that the SWR meter is only used to make
sure
> > > the impedance is within the range that the transmitter can handle.

Tuning
> > > the antenna is done by field strength measurements - just tune for
maximum
> > > radiated signal, and let the SWR become whatever it becomes. If

270. Comparison Review of the k2 fractal flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <G2qbOUJaVCIwJlH4mcnFdJ5cs=r9@4ax.com>
Source record: 182528

Hi All,

My page at:
http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
has been updated to follow the interests of the audience that wants to see a small antenna with positive qualities that counter balance the over-all deafness.

I have added a comparison design I call the "H Flyer." This is an extremely simple antenna having none of the twists, turns, and kinks required to fractalize a solution for the sake of fractalizing it. Three (3) wires (or five if you download the EZNEC file) rather than the Forty (40) or so for the k2. The name describes the shape which is a sloping, ends loaded dipole (or side-ways, sloping H).

So What?

The H Flyer conforms to the specifications for the k2 within a fraction of a dB or exceeds the k2 considerably. Yes it has F/B, perhaps a dB lower than the k2. It has a relatively good 10 degree radiation component (and slightly better than the k2 over-all).

So, how do we find those qualities of a fractal comparing to the H Flyer? Wide band tuning. Well here the H Flyer is easily twice the bandwidth. Small size. Actually, the H Flyer isn't as tall, merely elevated to roughly the same height - the k2 is the taller of the two (which gives it a fraction of a dB more gain at 10 deg).

With the interest of the community in low, small antennas that rely on ground to optimize key characteristics, I would propose that the "H Flyer" makes for a suitable and sometimes superior substitute of the k2. It is far easier to construct than the k2, and displays less sensitivity to minor changes in relation to earth than the k2 (although it remains relatively high). It is far more tolerant of matching. For those who wish to experiment, it appears that this design's characteristics are independent of the source's position along the slope of the vertical section. For the sake of simplicity, I chose the drive point at the lower end of the vertical section.

73's
Richard Clark, KB7QHC

271. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8neqom$14p$1@uni00nw.unity.ncsu.edu>
Source record: 182529

suestec <crayon@bcpl.net> wrote:
> To Dan and the group.
> Name here is Greg, call sign K3ANG.
> A friend of mine Chuck, call sign K3FT, has been using a slinky for YEARS!!!
> Here are his recommendations for the Slinky.
> From an email he sent out some time ago.
> Enjoy!
> +++++++++++++++
> I am Chuck K3FT. I currently use a SLINKY (tm) antenna at my apartment
> and operate 80 - 10 meters with it. My cost? approximately $ 8.00 for
> the four Slinkies (tm) (yes it's a trademarked name, believe it or not!
> HI), about 20 bucks for RG8X type cable and a couple of bux for
> incidentials. That was about it. In other words, I operate 80 - 10
> meters with a Slinky(tm) antenna mounted on my apartment balcony
> outside and it cost me about 25 - 30 bux total INCLUDING COAX! It's
> not the neatest and prettiest to look at.. but it fulfills three
> venerable Amateur Radio dictums - It's cheap, it works, and I built it
> so I learned something and had fun doing so.

Excellent. I concur and have built about the same thing using 4, and
also built a vertical hung on a rope using 3 or 4 of them worked
against a ground rod and counterpoise wire. Both worked well,
although I preferred the vertical one for 160M.

I got strange looks from the kids who wondered what the ol' fool was
doing with slinkytoyz hung around a rope.....(:+}}..... But, hey,
it worked!

I could imagine 4 on a top with one as a downlead ought to work well
as and a classic inverted L or sloping L antenna with some sort of
pi or series LC tuner.

Go for it!

Bob/NA4G

272. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399B75C4.12DE3A83@haertig.com>
Source record: 182530

Hey Richard,

All you say is true! However, the voltage ACROSS the two terminal
network in the tank implementation of the collinear antenna is
immaterial as it is not responsible for driving
any current into the elements.

What is important is the phase relationship of the current going in one
side of the tank and out the other. Because it is a two terminal
network it to be in phase, otherwise electrons would be piling up in the
tank and it would EXPLODE!!!!! (Well, actually, that is a little
hyperbolic.) (c:

Gray

And to pick a nit (all out of Kwell), the parallel resonant tank
circuit, which started this thread acts as a pure resistance (except in
the limit), and whatever current actually gets through it is in phase
with the voltage across it.

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "It sounds to me as if two different things are being compared here."
>
> At least!
>
> Reactance prevents an in-phase relationship between voltage and current
> in a circuit. It also changes the impedance of a circuit. More impedance
> if inductance and resistance are in series, less if they are in
> parallel.
>
> The phase angle is given as the angle whose tangent is X over R.
>
> The impedance magnitude of of a series circuit is the square root of R
> squared plus X squared.
>
> A simple example: 10 ohms resistance in series with 10 ohms reactance.
>
> Tangent is 10 over 10 equals one, and the angle is 45 degrees.
>
> Impedance is the square root of 200 and equals 14.142 ohms.
>
> Note that the current will lag or lead the voltage in the circuit by 45
> degrees depending on whether the reactance was inductive or capacitive.
>

> The point is this circuit with only two external terminals does NOT have
> a voltage drop which is in-phase with the current through the circuit.
> Every pure resistance does have its voltage drop exactly in-phase with
> the current through that resistance, regardless of phase relationships
> in the overall circuit.
>
> Best regards, Richard Harrison, KB5WZI

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

273. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399B78CB.6DEF08D2@haertig.com>
Source record: 182531

And it isn't a two terminal device off of resonance, either!

If all wires were two terminal devices we wouldn't be here talking to each other, because there wouldn't be any antennas to talk about, and Mr. Hertz would be back wondering, "Well THAT was certainly boring. Wonder what happens if I put my tongue on the Leyden jar." (c:

Imagine a stub collinear of two elements driven against ground. Then imagine paralleling a bunch of 1/4 wave stubs, each perpendicular to the main elements. In the limit, this would be two disks, perpendicular to the elements joined by a circumferential piece of metal with the elements attached to their centers. Now imagine making the upper element itsy-bitsy, teeny-weeny. You've just invented the cap hat!!

I don't think any of us has any trouble understanding that even though the cap hat doesn't radiate, there is a lot of current flowing in it because of its capacitance to the rest of the world.

Gray

Cortland Richmond wrote:
>
> I think that's his point. FIRST, he says you can't GET 180 degrees out of a
> 2-terminal device. THEN he says the third terminal is provided in a stub by
> its low common-mode impedance. IOW, a stub isn't really a two-terminal
> device at resonance.
>
> This has some interesting consequences. A _wire_ is a 2-terminal device, if
> it doesn't radiate.
>
> Cortland
> (kas@saber.net)
>
> Bart Rowlett wrote:
>
> > If the two currents are always identical, how can any phase shift be
> > introduced by a two terminal device?
> >
> > bart
> > wb6hqk

--
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274. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399B7A86.78066994@haertig.com>
Source record: 182532

To all,

I think this discussion is going swimmingly! I couldn't be happier with the things I'm learning, the understandings I am having confirmed, and the innovative ways in which people are looking at this problem.

Thanks!

Gray

--
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gfh@haertig.com

275. Re: YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <5BI9rDAFgwm5Ewra@ifwtech.demon.co.uk>
Source record: 182533

KC8LVJ wrote:
>I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
>the 6 Meter has a 6 foot beam. tower is 48 ft tall.
>Question: what should be minimum spacing between the two to avoid
>conflict?????

At least half the spacing that the manufacturers of the 6m yagi
recommend for stacking two of those yagis. For the reasons why, see my
web site.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

276. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399A5219.198A9659@cac.net>
Source record: 182608
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

ehsjr@bellatlantic.net wrote:

> The question was how do you measure impedance.
> An swr meter does not measure impedance. An swr
> meter (more properly, VSWR meter) measures a
> ratio of the voltage in the forward direction (ie out
> to the antenna) versus the voltage in the backward
> direction (ie back into the transmitter, reflected from
> the antenna). The bigger the reflected voltage, the
> higher the swr. An swr meter, nevertheless, is a good
> indicator of whether impedance is matched at 50 ohms,
> as you pointed out. It is certainly not the best.
>
> But impedance consists of 3 elements - capacitive
> reactance, inductive reactance and resistance.
> A true impedance measurement would be expressed
> as so many ohms, not as a ratio. And, typically,
> one would find expressions that look something like
> this: 23 +14 Jx That reading indicates the the
> complex impedance consists of 23 ohms resistance
> plus 14 ohms inductive reactance. If the expression
> were 23 -14 Jx it would mean 23 ohms resistance
> plus 14 ohms capacitive reactance.
>
> Now, why is this important? Because you want all
> of the power going out to the antenna to "see"
> nothing but resistance. In the case of an antenna
> with 23 ohms resistance plus 14 ohms inductive
> reactance (23 + 14Jx), the only power radiated
> by the antenna is the power across the 23 ohms
> resistance. The power across the 14 ohms inductive
> reactance is wasted. So - you want to get rid of
> that +14 Jx, even if it leaves you with 23 ohms,
> and an swr worse than 2:1. Why? Simple.
> You transform the 23 ohms to 50 ohms. Now there
> is no reflected voltage (no reflected power when there
> is no reflected voltage) and all of the power reaching
> the antenna is radiated, rather than having some of
> it wasted in Jx. There are a number of ways to
> transform the impedance, at the antenna, to achieve
> the maximum radiation of the available power. Pruning
> the antenna (cutting the wires smaller and smaller while
> observing the swr reading getting closer and closer to 1.1

> to 1) is one example. In a beam antenna (which would
> have an impedance in the low to mid 20's with some
> Jx reactance as in teh example expressions I used) a
> typical transformation AND elimination of the Jx is
> accomplished with a gamma match. A gamma match
> includes a transmission line transformer (which introduces
> + Jx (inductance) AND transforms the resistance from
> 23 ohms to 50 ohms) and a capacitor. The capacitor
> introduces -Jx. The +Jx is unavoidable, as it is necessary
> to attach the feed line to the center of the element and to
> some point away from the center to achieve 50 ohms
> resistance. The length of wire that allows attaching the
> center conductor of the feed line (the shield is attached
> at the center) to the 50 ohm point somewhere out on
> the element away from the center introduces the extra
> inductance - the +Jx. Now, if you have an accurate
> impedance measurement and know how much inductive
> reactance has been added to get to 50 ohms resistance,
> you can compute the value of capacitance needed to
> produce an equal amount of - Jx. Finally, in all cases
> above where the term resistance was used, the correct
> term is radiation resistance. I won't get into a discussion
> of that here, other than to say that it indicates that the
> signal it (the radiation resistance) "sees" is the signal
> it radiates out of the antenna. It is not the same as
> the resistance we talk about at the electronic component
> level, The signals those resistances "see" are converted
> to heat, not radiated.
>
> That is important stuff if you want to really make your
> antennas perform well. The simplest concept is this:
> you can get a good match (ie swr is 1.1 to 1) and have
> a lousy radiator. If you had, for example, 1 ohm of
> radiation resistance plus 49 ohms of inductive reactance, then
> most of your signal would be converted to heat in the
> inductor - only about 2 percent would be radiated.
> Clearly, you would want it to be the other way around!
> So, that's why there needs to be a distinction made
> that swr meters do not measure impedance.
>
> WildBill wrote:
>
> > sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
> > would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
> > be a 2:1 swr ... trim each end the same or add the same to each side to
> > get your swr down to which every frequency is of your interest..
> >
> > "sideband" <sideband@cac.net> wrote in message
> > news:3998450D.E150C5AB@cac.net...
> > > Doc:

> > >
> > > Thanks for this.
> > >
> > > Another question, now... If the impedance isn't 50 ohms (how do you
> > > measure this, anyway?) What would my options be to get it matched up?
> > >
> > > TIA
> > >
> > > -SSB
> > >
> > >

Uh, whoa... inductor? Grid? Huh?

I was hoping to be able to figure out, in advance, how long I'd have to make the two wire halves of a verticle dipole, cut those wires, attach them to a block of some sort, feed the coax, throw it up in the air, check the SWR's, tune it and go....

Now I need to build a gamma match or something similar to get this thing to work? I had always heard that the beauty of a Dipole was its simplicity...

So now I need to ask a bunch of questions, because (and yes, I'll come right out and say it) I'm ignorant where these things are concerned..

I'm a person of meager means. I can only work 4 hours a day (not by choice), so this dipole project, which will probably exhaust me when I put it up in the air, was conceived to both save me a few dollars, let me talk on the CB farther than the four miles I get out now, and get me some limited exercise.

1. How do I measure the resistance, inductance, and/or reactance at the feed point of a dipole? I have access to a relatively decent DVOM (if Fluke is decent), an SWR meter, and that's it...

2. Will I need a degree in Electrical Engineering to, once I've figured the above out, design and build this matching bridge/gate/whatever? I'm pretty handy with a soldering iron, and I do understand basic DC and AC electronics, (heck, I've even added my own little twist to the clarifier mod in the GrantXL/148/2000 that works VERY well), but I've never done anything such as this before, dealing with things I cannot directly measure. New ground for me.

3. Would it be simpler to design an antenna that had 50 ohms resistance in the first place, without the reactance/inductance, or would it be simpler just to make up the difference once an "efficient" design was created?

I know, I'm being bothersome, and for that, I do apologise. I'm just trying to understand and learn new things.

TIA, and 73's

-SSB

277. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399a5dac.1445769@news.akorn.net>
Source record: 182609

On 15 Aug 2000 23:29:01 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>>>>Thanks, Tom
>>
>
>Tom, looks like you fell for another Freak alias :-)))

Damn, You're right Yuri.

You can't tell a legit newsgroup poster from a Fractenna poster unless
you do a Dejanews search, and also look at the posting path.

"M Wallace" path was:
Path: blue.aol.com!audrey04.news.aol.com!not-for-mail

Fractennas last path was:
Path: blue.aol.com!audrey04.news.aol.com!not-for-mail

Dejanews says:
Results for: "mmwallace120741" Save this Search
SEARCH AGAIN for "mmwallace120741" in Deja.com Products | on
Northern Light Discussion Forums View all >>

>> rec.radio.amateur.antenna
Messages
1-3 of 3 matches
Page 1 of 1
Date Subject Forum Author
08/16/2000 Re: Lawsuit rec.radio.amateur.ant K1BQT
08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant
MMwallace120741
08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant Tom
W8JI
1-3 of 3 matches
Page 1 of 1

Right you are Yuri, another fake supporter added to Chip's AOL account
as a new screen name. Same posting access point as Fractenna, and
other name with no posting history until he suddenly appears and
supports Chip.

Amazing!

73 Tom

278. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399a6111.2315201@news.akorn.net>
Source record: 182610

On 16 Aug 2000 02:22:23 GMT, k1bqt@aol.com (K1BQT) wrote:

>Hi Tom--
>
>mmwallace120741 is, like the others, a bogus screen name with no posting
>history. Surely his "test" is as bogus as his fake identity. Where do you
>suppose this wellspring of deceit and fraud originates from??
>
>73
>
>Rick K1BQT

What are you doing in this thread Rick? Anyway, you are right. It was
another Chip fake.

You can't tell a legit newsgroup poster from a Fractenna poster unless
you do a Dejanews search, and also look at the posting path.

"M Wallace" path was:
Path: blue.aol.com!audrey04.news.aol.com!not-for-mail

Fractennas last path was:
Path: blue.aol.com!audrey04.news.aol.com!not-for-mail

Dejanews says:
Results for: "mmwallace120741" Save this Search
SEARCH AGAIN for "mmwallace120741" in Deja.com Products | on
Northern Light Discussion Forums View all >>

>> rec.radio.amateur.antenna
Messages
1-3 of 3 matches
Page 1 of 1
Date Subject Forum Author
08/16/2000 Re: Lawsuit rec.radio.amateur.ant K1BQT
08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant
MMwallace120741
08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant Tom
W8JI
1-3 of 3 matches
Page 1 of 1

Right you are Rick, another fake supporter added to Chip's AOL account
as a new screen name. Same posting access point as Fractenna, and
other name with no posting history until he suddenly appears and
supports Chip. There was only ONE post originated from that fake name
although deja news caught our replies that contained his name.

Someone needs a good headshrinking!
Amazing!

73 Tom

279. Re: THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399a63ab.2981614@news.akorn.net>
Source record: 182611

On Wed, 16 Aug 2000 01:50:50 GMT, "Chuck O'Neal" <coneal@ultranet.com>
wrote:

>This is something I am not proud of in your case,
>particularly considering your antics on this NG.
>I wish that I could say over the past 2 years of
>been reading this NG, I have learned something from you.
>I can not.
>Where the Hell did you get the EGO, poor
>behavior, and the multiple personalities? How did you
>turn into such a pompous ass? Perhaps you had
>better listen to the advice given to you on this
>NG by the many folks wiser than you ever will be.
>Oh, BTW, congratulations on the patent
>Hope this helps...
>Cordially,
>Chuck...K1KW

Chuck,

Don't feel bad. Rick Littlefield invited him here to this newsgroup,
and told him how to find it.

I'd like to hear how Rick justifies doing that disservice to this
group, which never used to be like this before his friend Chip
appeared!

73 Tom

280. Re: HELP: RF grounding advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399a6446.3136184@news.akorn.net>
Source record: 182612
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Tue, 15 Aug 2000 23:10:34 -0400, Dwight Stewart
<stewartx@sccoast.net> wrote:

> Well, I don't see how Yaesu could shield their FT-847 any better. It
>has an all metal case with 7 layers of component boards inside, with
>each board surrounded with its own metal shielding. In addition, a
>large number of the components on each board has still more shielding.
>Yet, this radio is really bad when it comes to poor grounding.

As I explained earlier, it isn't the shielding that's the problem.

It's how the bring the leads into and out of the case, and how they
ground and bypass the jacks that are the problem.

You can have all the shielding in the world and one poorly routed and
bypassed lead wiill totally negate all the layers of shields.

73 Tom

281. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <399A689F.B302BBE4@mindspring.com>
Source record: 182613

snip

> Right you are Rick, another fake supporter added to Chip's AOL account
> as a new screen name. Same posting access point as Fractenna, and
> other name with no posting history until he suddenly appears and
> supports Chip. There was only ONE post originated from that fake name
> although deja news caught our replies that contained his name.
>
> Someone needs a good headshrinking!
> Amazing!
>
> 73 Tom

Maybe, but I think think he would be tolerable if just the swelling went down.
:-)

282. Re: PCR-100

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Matt <doormatt@NOSPAMbigpond.com>
Message-ID: <f3um5.32026$c5.89174@newsfeeds.bigpond.com>
Source record: 182614
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Valid points from the previous poster. However I would be steering clear of the Icom computer controlled radios. I bought one a couple of years ago and it is a heap of shit - in other words I am not overly impressed with it's performance. I also have a winradio and it absolutely dumps all over the Icom. In the 3-4 years I have had the Icom there has been one software upgrade which didn't seem to be all that different to the original, however in the 18 months I have had my winradio there have been heaps of software upgrades. Have a look at their website - www.winradio.com
(in particular the xrs section) and have a look at what they offer, if you buy one you will not be unhappy with it. They are available in a heap of different options including internal cards and external boxes with excellent performance from all of the ones I have tried. Frequency coverage of the winradio is also superior, I have the 1500e which gives coverage from the very low part of the spectrum - from memory 50 KHz up to 1500 MHz and it offers all modes, including the digital modes. Hope you have fun,

Cheers

Matt

<mthompson14@yahoo.com> wrote in message
news:3999c1c4.2231393@news-server...
> Hello,
>
> I just recently purchased an Icom PCR-100. Couldn;t wait to
> get it home and hook it up. Keep in mind I'm new to Radio so take my
> comments for what they are worth.
>
> I'm pretty pleased with its performance. This is a good radio
> for the beginner. One thing I don;t like about this radio is that it
> only has FM WFM and AM, there is no SSB or CW reception, and becasue
> of this I'm missing out on alot.
>
> The documentation only garuntees this radio to receive as low
> as 500KHz. I have successfully tuned mine down to about 30KHz. Loran
> at 100KHZ being predominatly strong.
>
> If you don;t mind dropping the extra money I would suggest
> buying the PCR-1000 this has the added benifit of CW and SSB
> reception. Also if you purchase outside the US you can get these
> radios unblocked meaning you can receiver cellular phones, if thats
> your thing.
>
> Another thing you might want to take into consideration is,

> that I have heard rumors that this receiver gets alot of noise coming
> from the serial port of the PC it is hooked up to. I myself have not
> noticed anything but then again I'm no elmer:P
>
> Hope this helps
> Mike T.
>
>
>
> On Tue, 15 Aug 2000 22:06:32 GMT, "Peter" <ve9ptr@hotmail.com> wrote:
>
>
> >I'm looking for any thoughts or comments on this PC controlled radio from
> >ICOM....
> >
> >Pete
> >
> >
>

283. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399A7331.E01639E3@cac.net>
Source record: 182615
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

sideband wrote:

> Got a few questions for the antenna gurus.
>
> I'm thinking about building a wire type dipole in the apartment, which
> should have its center resonance somewhere close to 27.385, but I have a
> few questions first, before I invest any time in it.
>
> 1. Is it illegal for a CB'er (I'm not a HAM...yet) to build his own
> antenna?
> 2. Suppose I want the dipole to be able to handle up to 200 watts (I'm
> giving myself some serious room here, overbuilding if you will)? What
> guage wire should I use to make the transmitting and "ground" elements?
> 3. What wavelength should I try to build the antenna? I've got about 30
> feet total to play with here. 1/4 wave each side would equate to roughly
> 18 feet. 3/8 each side would come out to around 27 feet. What wavelength
> would resonate the best, and have the best "ears" for my application?
> 4. If I build it, for example, 1/4 wave each side, is that a 1/2 wave
> dipole, or a 1/4 wave dipole? Technically speaking, that is. I don't
> want to tell people I've got the wrong thing.
>
> What I'm planning on doing is setting a pully at the corner of the eaves
> on one corner of the building, and holding the antenna up there with
> fishingline from the top, and pulling it tight from the bottom the same
> way. This way I'll be able to put the antenna up and take it down easily
> to tune it, etc. I was going to run the coax out to a powerstrip (the
> type with the screws in it to mount power cables with crimp ends n
> them), support it with another length of fishing line, and center it on
> the edge of the building. Then run the radiating element and the ground
> element off the respective screw lugs , supporting them top and bottom
> with other lengths of fishing line. The antenna will be roughly four
> feet from the corner of the building.
>
> Is this setup feasable? Or would I be wasting my time?
>
> Thanks in advance.
>
> -SSB

I have posted my current work with EZNEC (A very fine program, if you ask
me) on this dipole at http://phoenixrising.cac.net/antennas.html

I'd greatly appreciate it if someone could nab the file therein, check it
out, and see if I've missed anything and/or done anything wrong entering the

design into the program. ALL constructive comments will be greatly appreciated on this.

Thanks in advance, and 73's.

-SSB

284. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ne120$hf0$1@nnrp1.deja.com>
Source record: 182616

In article <3999B445.7B8@attglobal.net>,
perge@attglobal.net wrote:
> Comments from Butternut vertical antenna users- Good,bad,worth the
> money,any tuning problems,ground mounted vs. tower mounted etc...?
> Thanks,Joe
>
Ditto 4 times...
Have had a B'nut forever, since before the WARC bands... started @ 5 bands (10,15,20,40,80) now 8 bands (added 12,17 & 30). Been roof mounted (blew off in an ice storm!)now on the ground w 12 radials. 10,15 & 20 were better with it @ 26 feet. 40 & 30 are great with it on the ground. 80M is very narrow, to be expected for a short vertical. 40M will cover one end or the other. Full coverage possible on all the other bands.
Go for it, ground mount it and put down a decent radial system....
you'll be happy.
73
Den Spiess W2DEN _._

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Before you buy.

285. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000816091708.16263.00000494@ng-bk1.aol.com>
Source record: 182617

>Right you are Yuri, another fake supporter added to Chip's AOL account
>as a new screen name. Same posting access point as Fractenna, and
>other name with no posting history until he suddenly appears and
>supports Chip.
>
>Amazing!
>
>73 Tom
>

I am (almost) always right :-)

I almost fell for JoeOxxx, wrote the comments, then when I looked at the address it rang the bell, sure enough, Freak's another "personality."

I am just wondering about mental capacities of our "genius." I thought that by now he would be a little bit more wiser, but I guess the brain fractal grooves must be cluttered with gobledygook from the patent application. What a misleading title on the patent, he dropped other two patent applications, wonder why.

Suggestion to Freak: If you need more supporting actors/personalities go to other than AOL services, get some more names, use them to post messages to other NG to create delusion of legitimacy (careful so you don't sound like you do) and then use it on this NG. Maybe you will get away with it. (I doubt it, by now we know that only person who agrees and "supports" him is one of him.) But go ahead anyway, we enjoy your "conversations" with yourself.

Hope it helps eventually :-

BUm

286. Best MICRO

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:00:00 UTC
From: Gomes <ct1hix@netc.pt>
Message-ID: <399a950c$1@212.18.160.197>
Source record: 182618

Best micro for the TS440S ?????

73 CT1HIX
Gomes

ct1hix@netc.pt

287. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:01:58 UTC
From: kk5yy@arrl.net
Message-ID: <3999d8fe.202749216@nntp.mindspring.com>
Source record: 182579

On Tue, 15 Aug 2000 09:12:30 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>Chip says it's out today- no statement of claims given.
>
> 6,104,349
>
>Bill-W4BSG

It isn't on the patent office web site yet but they run a bit behind.
The number is about right for the timing. I can't wait until it's
posted. I've got the soldering iron all warmed up and traceable
field strength measuring equipment ready.

Hoo Boy we gonna find out if this hound can hunt. Modeling
is all well and good but you know us experimentalists---

288. DU-2 Loop Antenna Schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:13:46 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <8ncmbd$2vi$1@nnrp1.deja.com>
Source record: 182580

Hi,
Does anyone happen to have... or know where to find a schematic for
the old (1942 or so) US Navy DU-2 200 KHz-1600KHz Loop Antenna unit?

And, perhaps, a 2nd question -- Does anyone know if there has ever
been an article on the subject of replacing the ancient 12SK7's in that
unit with transistors?

73,
Marv WC6W

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Before you buy.

289. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:40:23 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8ncntk$4mf$1@nnrp1.deja.com>
Source record: 182582

I have some buddies up here that just run a dipole around the top of
their wooden fence. They don't get great signals, but they do get on the
air. Some of the other posters mentioned the inverted V from the roof
peak which sounds good.
I live in an apartment myself and toss my 40M dipole off the balcony
into the trees on either side after dark so my neighbors won't have to
look at it. That arrangment has worked suprisingly well for me. Maybe a
little night stealth antenna action is the solution. 40M is better at
night anyway. :-)
73 OM

In article <39971782.170D7DB@home.com>,
Jim Hahn <jimboL51@home.com> wrote:
> Please help! I live in an area in San Diego where we have extremely
> restrictive CC&R's. Am getting back into amateur radio after an
absence
> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
> primarily interested in cw on 40 or 30 meters. I cannot place an
> antenna really higher than our fence outside our house which is about
> 8-10 in height. Will not be running greater than 90 watts which is
the
> most that the DX-60 will put out. Suggestions for an antenna for this
> setup? I would love to just put up a dipole but will not be possible
> because of neighbors. Also would love to put up the RG-8 by
Cushcraft
> but would have the same problem at 26'. Have looked at: MFJ loop
> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
> but have been told unless you have the bilal up high it would be a
waste
> of time. Thanks for any input anyone can give me! Jim in San Diego
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

290. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:46:58 UTC
From: wojo <wojohohoho@wojo.com>
Message-ID: <3999E475.2BDBBCD6@wojo.com>
Source record: 182581

I believe that one can get the patent and construct one of the items
for himself and not infringe on the patent as long as you do not sell the item
that you built yourself.

So, if NC can get a printout of the patent for some good drugs,
he can make a batch and take it easy. (fda may be upset with him ...)

with all the posts that nc made about lawsuits, why is his lawyer not
making the posts for him? That is what a lawyer is paid for.

gotta go and play farctal antenna games...

mm wrote....

> If an Amateur builds one of these for himself, or a friend, I can't see how
> it's possible to practically enforce the patent unless NC drives around the
> whole of the US looking at what's on the roof.
>

291. How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:48:23 UTC
From: jason_hsu@my-deja.com
Message-ID: <8ncoci$58u$1@nnrp1.deja.com>
Source record: 182585
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

How precisely cut must a wire antenna be? I have heard about 1/2 wavelength wire antennas, but if the wire must be close to this length, then you can only use one band or are willing to have several different antennas. I know that tuners are intended to correct mismatches, but I have heard that performance does suffer if the mismatch to be corrected is high enough and that an even bigger mismatch can be too much for a tuner to handle.

Can anyone shed some light on this? I'm confused.

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/tech-dwdm.html

Sent via Deja.com http://www.deja.com/
Before you buy.

292. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:55:20 UTC
From: k6mhe@arrl.net
Message-ID: <3999e410.16832313@news.mcn.org>
Source record: 182592

TLA is a DOS program by Dean Straw, N6BV, the editor of the ARRL Antenna Book. It provides analysis of a transmission lines and design/analysis of antenna tuners. It is bundled with the current edition ARRL Antenna Book.

A newer version for Windows called TLW will be bundled with the newest version of the Antenna book coming out soon. This version has some nifty features such as calculations on the fly which makes it much better to use.... I have had knowledge of the program (TLW) for sometime (beta tester) and can now, by Dean's permission, "let the cat out of the bag" and let you know that it is coming...

A very worthwhile program for antenna experimenters.

73
Danny, K6MHE

On Tue, 15 Aug 2000 11:05:24 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>EZNEC is an antenna analysis program. You describe to the program what
>the antenna physically looks like, and it tells you the pattern,
>impedance, currents, and derivative information (like front/back ratio,
>SWR, etc.). You can get info about EZNEC, and download a free demo
>program (fully functional except limited in antenna complexity) from
>http://eznec.com.
>
>I'll have to let someone else answer about TLA. I heartily recommend TA
>(terrain analysis), though. It shows the effect of terrain of arbitrary
>cross-section on the pattern. It uses a free-space vertical pattern from
>EZNEC or any of Brian Beezley's modeling programs as its input. You can
>get information about TA from k6sti@n2.net.
>
>Roy Lewallen, W7EL
>
>sideband wrote:
>>
>> I've seen numerous mentions of these programs (suites?) in posts here,
>> and I'm curious... What are they? What do they do? Where can I download
>> and/or purchase them?
>>
>> TIA
>>
>> -SSB

293. Re: EZNEC, TLA, and others...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:55:39 UTC
From: "(W.G.Ewald)" <wgewald@att.net>
Message-ID: <oipjpsk1cu557lthml00bcqipk0v4953kj@4ax.com>
Source record: 182583

On Tue, 15 Aug 2000 19:37:32 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>...EZNEC (Roy's own program) in its current, Windows, version is so
>user friendly it is like shaving your own face.
>
>It is easy- and fast, and lets you cut and try until you are happy with
>the results.

Ouch.

294. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 00:58:02 UTC
From: k3bu@aol.com
Message-ID: <20000815205802.15386.00000027@ng-bd1.aol.com>
Source record: 182584

>It isn't on the patent office web site yet but they run a bit behind.
>The number is about right for the timing. I can't wait until it's
>posted. I've got the soldering iron all warmed up and traceable
>field strength measuring equipment ready.

it is posted at IBM site

http://www.patents.ibm.com/details?&pn=US06104349__

Yuri

295. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:29:31 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815212931.20917.00000042@ng-fa1.aol.com>
Source record: 182586

four slinkies auta do it.

>I have to put my HF antenna in my attic under the roof. I have 32 feet
>of free space.
>I am thinking of using slinkies. I would like to get the antenna
>resonant at 80m.
>
>Questions:
>
>1) Has any one built a 80m dipole from slinkies?
>
>2) Or would an end fed wire be better?
>
>3) How to feed Them?
>
>4) Would end fed slinky allow the antenna to resonate on more than
>band?
>
>5) Does anybody have any experience they would be willing to share?
>
>Dan Yemiola
>
>AI8O@Qsl.net
>
>
>
>
>
>
>
>

296. Re: Telescoping antenna masts..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:34:16 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815213416.20917.00000046@ng-fa1.aol.com>
Source record: 182587

good page.

>I think he's looking for this
>
>http://www.bright.net/~kanga/kanga/dk9sq.htm
>
>Jack
>WA9fvp
>
>
>Bill P. wrote in message ...
>>There is a new fiberglass telescoping mast out of Germany. Saw it
>somewhere
>>on the web recently. Try a search.
>>
>>
>>
>>
>
>
>
>
>
>
>
>
>

297. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:35:30 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815213530.20917.00000047@ng-fa1.aol.com>
Source record: 182588

whatre the chances he could find it on the net?

>Chip says it's out today- no statement of claims given.
>
> 6,104,349
>
>Bill-W4BSG
>
>
>
>
>
>

298. Re: Can I use a scanner antenna to transmit?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:38:51 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815213851.20917.00000048@ng-fa1.aol.com>
Source record: 182589

some are advertised to transmit
you might start there

>I've recently gained my ham license. I have various wide-band scanner
>antennas from earlier scanning days. Apart from the SWR
>considerations, is there any danger to my new amateur radio equipment
>in using a scanner antenna for transmitting in the 2 metre and 70cm
>amateur bands?
>
>Chris L
>
>
>
>
>
>

299. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:43:28 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815214328.20917.00000049@ng-fa1.aol.com>
Source record: 182590

Model any other antenna in a small footprint and low height and compare it too
something that fills a box.

Sure theres enough handicapping?

>Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have a
>post from a newcomer asking 'what's better'?
>
>Why do we not have an answer for this?
>
>Could it be that, for those who must deal with low heights, a directional
>antenna with equivalent, or nearly equivalent field strength at low (DX)
>angles
>to a 1/4 wave monopole--virtually twice as high--is NOT advantageous?
>
>Or are those who want to hoodwink fellow hams that a new technology is a
>useless one-- do they want to keep other IGNORANT?
>
>Go try it yourself, over real ground:
>
>Model an /18 wave monopole, with, say, 8-10 radials;
>Model a low dipole up 1/8 wave;
>Model a sloping dipole up 1/8 wave;
>Model a horizontal loop up 1/8 wave;
>Model a mobile whip with radials;
>Model any other antenna in a small footprint and low height.
>
>Model these over poor to good ground and look at the field strength at low
>angles, say 5-15 degrees.
>
>Then decide what's a "dummy load" and what's "deaf".
>
>The K2 Fractal Flyer was designed because people ASKED for it. They wanted a
>low height antenna, with no pretensions that it would work like a Yagi up 100
>feet--BUT they wanted something that would be directional and work DX well.
>
>So, go ahead: give us that ideal solution for an antenna restricted to 1/8
>wave
>height. Then tell how the K2 Fractal Flyer compares.
>
>73,
>Chip N1IR
>
>
>

>
>
>

300. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:49:24 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000815214924.20917.00000052@ng-fa1.aol.com>
Source record: 182591

dBi

looks like you found religion,

>Here's some useful info. Modeled with good ground, 1/8 wave up:
>
>Antenna F.S. at 10 degrees el
>
>K2 FracFlyer -4 dBi
>W8JK -4.7 dBi
>Dipole -6.4 dBi
>Hor.Loop -9.3 dBi
>
>
>Are we to conclude that all antennas are 'deaf'?
>
>73
>Chip N1IR
>
>
>
>
>
>

301. Re: THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:50:50 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <_rmm5.28692$NH2.244037@typhoon.ne.mediaone.net>
Source record: 182593

This is something I am not proud of in your case,
particularly considering your antics on this NG.
I wish that I could say over the past 2 years of
been reading this NG, I have learned something from you.
I can not.
Where the Hell did you get the EGO, poor
behavior, and the multiple personalities? How did you
turn into such a pompous ass? Perhaps you had
better listen to the advice given to you on this
NG by the many folks wiser than you ever will be.
Oh, BTW, congratulations on the patent

Hope this helps...

Cordially,

Chuck...K1KW

302. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 01:59:36 UTC
From: jamesrhampton@my-deja.com
Message-ID: <8ncshv$9rm$1@nnrp1.deja.com>
Source record: 182595
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

In article <8ncoci$58u$1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> How precisely cut must a wire antenna be? I have heard about 1/2
> wavelength wire antennas, but if the wire must be close to this
length,
> then you can only use one band or are willing to have several
different
> antennas. I know that tuners are intended to correct mismatches, but
I
> have heard that performance does suffer if the mismatch to be
corrected
> is high enough and that an even bigger mismatch can be too much for a
> tuner to handle.
>
> Can anyone shed some light on this? I'm confused.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/tech-dwdm.html
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>
A good antenna matching unit can handle a lot. You could cut for the
lowest band and use a matchbox to tune on other bands. You may want to
go to open ladder line rather than coax for this however as even
harmonics of the fundamental will be feeding into a current node
(voltage peak) and coax loss can be high (well, perhaps not with
hardline!). I had a lot of grief with a vertical, a dipole, and a
folded dipole as a kid. I ended up buying a few LARGE spools of 8 ga
stranded wire - and strung several hundred feet across my parents'
property at heights varying from 30 to 50 feet. It terminated at the
far end into a chain link fence running several more hundred feet
(reasonable DC ground - not safety ground). I ran a Johnson Viking
Ranger I into this thing and worked the world with 65 watts AM and 75
watts CW. I also had one HUGE signal on 160 meters! Nothing like a
lot of wire and a good tuner!

73s from Rochester, NY
Jim AA2QA

Sent via Deja.com http://www.deja.com/
Before you buy.

303. Re: Remember those GOTHAM verticals...???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 02:00:51 UTC
From: n2ey@aol.com
Message-ID: <20000815220051.29533.00002335@nso-fj.aol.com>
Source record: 182594

In article <3999C4BF.242C5BD5@cornell.edu>, JGinNY <jwg6@cornell.edu> writes:

>Are they still around? They were for so long a fixture in the
>advertising pages of QST.

They're long gone. Basically, they sold aluminum tubing.
>
>I have some questions about those antennas:
>
>They were advertised as multi-band, trapless jobs. According to one of
>their ads, the thing was like 23 feet long,
>*requred NO radials*, and was fed with good ol' low-impedance COAX
>cable.

That's right.
>
>Question: How could it be run as a multi-band ant with just co-ax??

See below.
>
>The aforementioned ad stated that for 80 and 40 meters, a tap location
>was found experimentally on the loading coil, to give a proper match on
>those bands.
>
>On the higher-freq. bands, the antenna system relied on an ATU _or_ the
>pi-network at the output of the rf amp, to provide matching.
>
>I don't understand how the coax could act as an efficient transmission
>line, especially in the latter case (on 20/15/10).
>Wouldn't it have been much more efficient if the trans. line in that
>case was an open-wire parallel feeder? Wouldn't coax have been really
>lousy, in comparison? Wouldn't the losses due to a (I would expect)
>very high SWR on the line, be considerable? Why co-ax, then?
>
>Considering it in another way -- on 40 and 80 meters, say the radiator
>with loading coil amounted to an electrical quarter wavelength. OK.
>Then it would be compatible with 50-ohm co-ax. BUT that would require a
>ground/radial system -- no? How could it be an effective system, on
>those bands then, _without_ any radials?
>
>Very interested to hear what the deal was, behind this ant. Always
>sounded a little too good to be true...
>
>Anybody got the scoop on this?

Here's what I know about them:

The dern thing was essentially 23 feet of tubing and a BIG loading coil. Only difference between models was the size of the loading coil!

Why 23 feet? That's ~5/8 wave on 10 meters.

From what I have gathered, the loading coil was used on ALL bands. It worked on all bands, all right - you just had to go out to the antenna and change the connections to the loading coil! They never said it worked on all bands "automatically" or "without adjustment". We just assumed that's what they meant!

You also needed a ground connection - some ground rods, usually. Radials would be a lot better, of course. Coax was used because it's an unbalanced radiator. The coax shield was grounded in all cases.

On 80 and 40, the loading coil was in series with the vertical element to establish 1/4 wave resonance, and the end of the coil went to the coax center conductor. The coil's inductance was adjusted by shorting out turns with a clip lead.

Of course a base-loaded 23 foot vertical with no radials isn't the most efficient antenna in the world, but it could be made to load and it would radiate. (They never made any gain or efficiency claims, remember).

On 20 and above, the coil was connected between ground and the vertical element. The coax center conductor was tapped onto the coil a few turns above ground, and the system resonated by shorting out turns with a clip lead. By cut-and-try, you could probably find a point where the SWR wasn't too bad.

If you had a wide-range antenna tuner, you could just feed the thing directly with coax on 20 and above. The SWR would be awful, of course, but it would radiate a little! Again - they didn't make any claims for gain or efficiency. You might lose 95% of your transmitter's output in coax and ground losses, but the other 5% would get radiated.

The trick was that you had to change tap points to change bands. And the results claimed were made at the peak of the sunspot cycle, at a time when 25 watts of AM and a wet string could work the world. Those claims disappeared after a few years, when the sunspot number came down...

Earliest QST ad I can find is Feb 1953 - they sold only beams then. The verticals came along a few years later. They were still in QST in the late 1970s.

73 de Jim, N2EY

>73
>

304. Re: DU-2 Loop Antenna Schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 02:16:36 UTC
From: jack parr <parrfoo@sympatico.ca>
Message-ID: <3999FAFB.DBAACEDA@sympatico.ca>
Source record: 182596

Hi Marv
Don't know anything about question #1, but re #2, I have successfully replaced 12SK7's, etc with 2N1302 hi-voltage transistors. They take up to 150V dc. I will not say even these are plentifully available. I got mine from an old board for Nixi tube displays. My tubes were in an old UK RX. I replaced them and did not have to re-adjust anything.
Jack Parr

Marv_E_Ads@Juno.com wrote:

> Hi,
> Does anyone happen to have... or know where to find a schematic for
> the old (1942 or so) US Navy DU-2 200 KHz-1600KHz Loop Antenna unit?
>
> And, perhaps, a 2nd question -- Does anyone know if there has ever
> been an article on the subject of replacing the ancient 12SK7's in that
> unit with transistors?
>
> 73,
> Marv WC6W
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

305. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 02:22:23 UTC
From: k1bqt@aol.com
Message-ID: <20000815222223.07402.00001173@ng-cb1.aol.com>
Source record: 182597

Hi Tom--

mmwallace120741 is, like the others, a bogus screen name with no posting history. Surely his "test" is as bogus as his fake identity. Where do you suppose this wellspring of deceit and fraud originates from??

73

Rick K1BQT

306. Re: Radial lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 02:23:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8ncu3blhp1@plutonium.btinternet.com>
Source record: 182598

Hi Larry,

For a given total amount of wire on or under the ground it is always better to have more short radials than fewer long ones. (This does not apply to elevated radials).

Radial wires on the surface of the ground have a propagation velocity crudely half of the free space value. It depends on soil conductivity. But they display very low Q resonant effects so lengths are very uncritical. Make surface wires about 1/8 of the free space wavelength. Tread them down and allow the grass and weeds to grow over them. With good soil a minimum of 8 wires would not lose more than a couple of dBs with a 1/4-wave inverted-L. If there's a buried incoming domestic water pipe connect that into the ground electrode system but its not a lot better than a single wire.

Shallow buried wires have even lower velocities and resonant effects are almost absent. Lay down 8 or more wires, a spade-cut deep, which need be no longer than 1/16 or 1/20th of the free space wavelength in good soil. Don't bother with rods or plates unless you already have some for other purposes in which case include them in the ground system. You will very likely find a small number of buried radials as short as 15 or 20 feet will allow satisfactory operation on all bands from 1.8 MHz upwards. Will do very well on an 80m inverted-L.

The radials need not be uniformly distributed. They can be spread over less than 180 degrees in the general direction of the antenna wire. Use bare copper wire preferably 12 gage. Use more wires rather than longer wires.

Just put up the longest antenna wire you have room for and end-feed it via a simple L-network tuner. To gain extra length for 160 or 80m use an inverted-U, or bend the far end horizontally through a right-angle.

Download program ENDFEED from my website. It was written with just your present particular needs in mind. One small file only. Downloads in a few seconds. Not zipped up. Run immediately. It will also tell you the L or T match inductance and capacitor values for given antenna height and length.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Larry Benko wrote

> I am helping a person put up a low profile antenna which
will be
> an inverted L (30' high & 60' total length) fed against
ground
> and matched with a tuner. Given that he would like to
load it
> on all HF bands (except for 160m) and will probably only
opt for
> only 6 or 8 radials, what would be the preferred radial
lengths?
> Initially I thought that 1 for each band of 1/4 wavelength
+ 5%
> and then thought that a few longer ones would be better.
>
> Thanks,
> Larry, W0QE

307. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 03:28:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nd1on$c1t$9@bashir.peak.org>
Source record: 182599

Bob Miller <bamiller@texas.net> wrote:
:>RatShack, but I'd really like to do this right... Is there a way to test field
:>strength without said meter?

: You might try coupling a low-wattage light bulb to your antenna, and
: then tune for maximum brightness. When I was a kid, I used to tune up
: my transmitter by just connecting a light bulb across the antenna
: terminals.

Unfortunately, that changes the input impedance of the antenna system. It
is the same as connecting an paralled inductor and resistor across the
input - not necessarily a desireable thing.

--
Bill Nelson (billn@peak.org)

308. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 03:33:41 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nd22l$c1t$10@bashir.peak.org>
Source record: 182600

sideband <sideband@cac.net> wrote:

Bill:
:
:Thanks for the input on this one, too... Another big question, though....

You are welcome.

:How could I test field strength without a field strength meter? I don't have
:access to one that's worth a darn. I suppose I could get one of the cheapies from
:RatShack, but I'd really like to do this right... Is there a way to test field
:strength without said meter?

You don't need a precise meter. I have used a Rat Shack meter in the past,
and it worked fine. You are interested in obtaining maximum field strength,
not in the actual strength of the field.

Be sure to do the measuring at a fairly large distance from the antenna.
While two or three wavelengths is usually sufficient - ten is much better.
You do NOT want any near field effects interfering.

--
Bill Nelson (billn@peak.org)

309. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 03:35:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nd25r$c1t$11@bashir.peak.org>
Source record: 182601

sideband <sideband@cac.net> wrote:

:> Please help! I live in an area in San Diego where we have extremely
:> restrictive CC&R's. Am getting back into amateur radio after an absence

If I recall correctly, the FCC has stated that the CC&Rs cannot prohibit
amateur antennas.

--
Bill Nelson (billn@peak.org)

310. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 04:00:37 UTC
From: suestec <crayon@bcpl.net>
Message-ID: <lqom5.693$Dx1.186306@news.abs.net>
Source record: 182603

To Dan and the group.
Name here is Greg, call sign K3ANG.
A friend of mine Chuck, call sign K3FT, has been using a slinky for YEARS!!!
Here are his recommendations for the Slinky.
From an email he sent out some time ago.
Enjoy!
++++++++++++++++
I am Chuck K3FT. I currently use a SLINKY (tm) antenna at my apartment and operate 80 - 10 meters with it. My cost? approximately $ 8.00 for the four Slinkies (tm) (yes it's a trademarked name, believe it or not! HI), about 20 bucks for RG8X type cable and a couple of bux for incidentials. That was about it. In other words, I operate 80 - 10 meters with a Slinky(tm) antenna mounted on my apartment balcony outside and it cost me about 25 - 30 bux total INCLUDING COAX! It's not the neatest and prettiest to look at.. but it fulfills three venerable Amateur Radio dictums - It's cheap, it works, and I built it so I learned something and had fun doing so.

You can duplicate your own for LOTS less than the 40 bux he's asking (plus shipping) AND you can probably get coax too. SO you have a complete system and you built it yourself!

TO ACQUIRE

First, go to WALMART or any other larger store. Slinkies sell for about $1.99 each. Best to call the store and ask. Sometimes they run out AND sometimes they stock the plastic ones. Make sure you get the metal Slinky! Check first - save the driving. Buy FOUR of these. Cost - about $8.40 including tax. (why four? AHH! Stay tuned, boys and girls! You'll see!)

Second, grab a piece of scrap wood/plexiglass(tm)/LEXAN(tm) or similiar material. It should be rectangular about 6" - 8" by 1" or so. Not picky on size, it's used as a center support for the dipole. The 1" is for wood, if you use plexiglass/LEXAN it will be narrower. It has to be wide enough to take a screw eye that will be used for a center support point, but that's about it. If it's wood, paint it with something to protect it. If plastic, leave it alone. Cost - about zero. (Total cost so far - about $8.40)

Third, get some stranded wire with insulation. #18 or so will work. You need 4 feet. Cut into two equal length pieces. Strip each end. This is used to connect the SO239 connector to the antenna ends using delta matching techniques. Total cost still about $8.40 unless you bought wire and plexiglass/lexan.

Fourth, get an SO239 bulkhead mount female coaxial connector. Scrounge one. If you have to buy one they are about $2 new or so. Total cost now (if bought) about $11.00.

Your total cost for all new should be now around $11 or so. Maybe a little more if you bought some of the things that most of us have lying around. However, it's still a lot less than the 40 bux plus shipping he'll get.

BUILDING it.

First, take two Slinkies (tm). Clean both ends of EACH Slinky very well with alcohol or other suitable cleaner to remove oxides, greases, oils. Rough up the flat surfaces with some sandpaper, file, etc. Reclean. Take a LARGE WATTAGE soldering gun or torch and tin the cleaned end of each Slinky with solder. It will discolor, but no big deal. Just tin it well. You will end up with eight tinned ends - two ends for each Slinky. Place the flat side of the tinned end of one Slinky against the flat side of the tinned free end of another Slinky so that it makes ONE continuous coil with the turns going in the same direction.

Second, wrap some copper wire around the mated ends so they are secured, mechanically, to each other. Solder them together and wrap with electrical tape or some othe kind of covering. Do the same with the other two Slinkies. YOu will end up with 2 LONG Slinkies.

Third, get 2 medium sized alligator clips and solder one onto each end of the previously stripped ends of the two pieces of insulated stranded wire. You will have two wires, each having an alligator clip on one end. Cover these soldered joints with protective material (electrical tape, etc) You will end up with two pieces of equal length insulated stranded wire with an alligator clip at one end of each piece convered by protective material.

Fourth, clean the center pin AND one corner hole of the SO239. Tin these cleaned points. Solder one end of the already stripped insulated stranded alligator clip wire to the center pin of the SO239 and the other alligator clip wire to the tinned corner hole of the SO239. Cover the backside of the SO239 with protective material. Center and mount the SO239 on the flat side of the center support material. Orient it so that the SO239 center pin is pointed towards the center of the support. SECURE the SO239 to the center support. MAKE SURE IT IS WELL AND TIGHTLY SECURED SO IT WILL NOT MOVE!!!!

Fifth, take the center material (wood/plexiglass/LEXAN) and mount two eyebolts into the flat side - one on each side of the already mounted SO239. Make sure the eyebolt is located on the same side as the SO239 connector. Space each one about 2" - 3" from each side of the SO239. Secure the eyebolt with a nut. Install a screw eye into the top narrow part of the center support so as to provide a place to hang/attach the dipole center support to a wall hook, branch, or other center support. YOU MUST PROVIDE CENTER SUPPORT FOR THE DIPOLE!!!!!

Fourth, clean the eyebolts with cleaner. Take the SO239 and clean and tin one of the holes in the corner of the connector. On the backside of the SO239 connector, solder one end of the previously prepared piece of insulated stranded wire with an alligator clip to the center pin of the SO239. Solder the other piece to the tinned hole in the corner. Cover the backside with something to protect it from the elements. Secure the SO239 assembly BETWEEN the eyebolts so it is mechanically secure. This can be done with tiewraps or any method you like. THE KEY IS MAKE SURE THE SO239 is REALLY SECURE and UNMOVEABLE.

Fifth, take a free end from each doubled up Slinky and carefully bend this end of each Slinky around the eyebolt. One turn or two is all you need. Crimp it so it makes as good a mechanical connection as it can be. Solder it REALLY WELL. Cover the connection with some covering material to protectc it.

What you now have is this...

1) Two Slinkies soldered together on each side to make a doubled up LONG SLINKY. An end of each doubled up Slinky is soldered to an eyebolt. There is an unused eyebolt that acts as a connection point to hang the center support. The other end of each Slinky leg is free and can be slipped through a support loop, bent into a loop and hooked over a branch, hook, whatever floats your boat.(Just make sure it's insulated!) The two wires from the SO239 hang free and are terminated in alligator clips.

THATS THE WHOLE ANTENNA! Total cost- about 12 bux or so. All you have to do is make sure the SO239 is secured well to the center support material. Make sure that the center pin of the SO239 goes to one free hanging wire/clip and the corner hole of the SO239 goes to the other free hanging wire/clip. THAT'S IT! You now have a dipole that will work 80 - 10 meters with a tuner.

TUNING and USE

If you have an antenna analyzer like the MFJ249/259 (worth their weight in PLATINUM!!!!) you can hang the dipole up and check the SWR at the center conductor. Stretch out the dipole and hang it up. Stretch it out as far as you can and route the antenna as best you can. Go out from the center of the dipole on one side and clean the Slinky turn at your chosen point. Clip the alligator clip from one wire to this point. Find the other same exact turn location on the other Slinky side and do the same for the other wire/clip.

Check the SWR on the bands of interest. If you can tune it, go for it and enjoy! If you have an antenna analyzer sweep the bands and note the resonant points. Play with the clip/Slinky coil points until you find resonant points in the band(s) of interest.

Once you have the tap point located, mark and/or permanently attach the clips. I leave mine free to move and just protect them from the elements so I can adapt to different configurations. Odds are you will find a point where you can tap the antenna permenantly and, with the

tuner, tune all the HF bands. I do and it works passably. It gets you on the air and squirts RF out and you can make contacts.

RESULTS

It took me about 1 hour to build this antenna. I spent, including coax about 25 bux. I mounted it following the perimeter of my balcony so it bends and snakes about a bit. It is about 25 feet off the ground. I work consistently around the east coast and have worked DX too as well as out to the Midwest USA. Yes, it's inefficient, yes you need to have a ground system (You DO have a ground system, I trust! HI) and it's a compromise. BUT it makes a good emergency antenna, apartment antenna, or just one that can be coiled up and put in a small box for 'being there when you need it!'. Plus it's just fun to 'speriment! HI.

TECHNICAL NOTES

The Slinky coil is about 2.5" in diameter. You stretch 'em out so each turn is about 2.5" apart (give or take). Figure the # of turns times the diameter will give you the length in feet. Two Slinkies per side is about 90 some odd feet or more total length. The movement of the alligator clips towards or away from the center point is 'delta matching' the antenna so as to achieve a match to the transmitter. This is best found by doing. Make sure you have some kind of ground for your station. This will affect the operation of the antenna as well as minimize radiation problems with TVI/RFI, etc.

When you are finished using the Slinky dipole, just unhook the free outer ends, let it coil itself up into a nice tight coil and voila! instant portable antenna!

NOTE! The slinky WILL RUST if left out in the elements. You can protect it by spraying it with Krylon CLEAR lacquer or some other type of protective coating. I didn't do mine and it lasted about 3 months before surface rust appeared. It still functions, but I must replace it within a year or so from now. Just a warning note.

Enjoy! 73 Chuck K3FT

contact me at k3ft@erols.com for info, questions, suggestions. I use the Slinky most every night andyou can find me on MDD on 3643 Khz at 0000Z and 0300Z. I also listen to 146.07/.67 W3FT repeater when I'm home.

++++++++++++++++
Dan Yemiola wrote in message <399A1607.5BE80D81@LexComInc.net>...
>I have to put my HF antenna in my attic under the roof. I have 32 feet
>of free space.
>I am thinking of using slinkies. I would like to get the antenna
>resonant at 80m.
>
>Questions:
>

>1) Has any one built a 80m dipole from slinkies?
>
>2) Or would an end fed wire be better?
>
>3) How to feed Them?
>
>4) Would end fed slinky allow the antenna to resonate on more than
>band?
>
>5) Does anybody have any experience they would be willing to share?
>
>Dan Yemiola
>
>AI8O@Qsl.net
>

311. Re: k2 fractal flyer review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 04:22:07 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399A1744.711FD833@bellatlantic.net>
Source record: 182602

Geez Richard, I don't know. But I think you can get a
broader match with a 50 ohm resistor at the end of
the coax. Suspend it inside half a tennis ball which is
lined with copper, and you'd probably get a pretty
good F/B ratio. You'd certainly have small space,
and might not be impacted by the environment. I've
actually worked people off a dummy load - amazingly
both of us heard each other. I can't claim DXCC
that way - more like QVDLIYGA (QSO - Very Damn
Lucky If You Get Any).

What's left? Gain. I can't control the 100+ db
attenuation at distance - all I can try to control
is how much signal I can collect (or radiate)
at my location, and the direction I want my
"signal collector/radiator" to favor. Q - maybe
I can make the collector real narrow with
a better S/N ratio - but the Fractal apparently
is pretty broad.

I may be forced to try to build one of these
things just to satisfy myself. The tennis ball
contraptuion will be easy by comparison.
But how would a "real" antenna compete?
Suppose you went vertical with a slinky,
occupying the same height as the Fractal.
I *assume* you could match it at 50 ohms
by selecting the right points on the slinky.
I haven't done it so I don't know. But
overall, wouldn't that be a more effective
antenna on say 20 meters than a Fractal,
even with no F/B on the slinky? You could
even add another slinky within the .2
wavelength box as a director or reflector.
I dunno - maybe you couldn't stretch the slinky
far enough within 1/8 wave to make it play.
Certainly the slinky idea is physically far
easier to implement than the fractal - whether
it would outperform the fractal is beyond me.
Heck - maybe a 1/8 wave whip with loading
coil and radials would outperform the Fractal,
at the cost of no F/B. After all, you can
squeeze an awful lot of distance out of a very
small vertical - I'm thinking of 80 meters mobile.
Maybe the REAL test of a Fractal is in a mobile,

where small height is real important.

I just don't know. Worse, I want to build one of
these things so I can understand their performance
first hand. But I don't know how. I can't figure
out the element lengths nor the X-Y-Z angles
between the elements. I'm afraid someone
brighter than me will have to publish that information
if I am to be able to build one.

But - on the plus side - your post and diagram
are GREAT. At least now I am beginning to learn
something about these beasts, which is what I've
been trying to do for quite some time. I may be
missing a lot here, but whatever I am getting is
directly as a result of your help. And I really
appreciate that. Thanks!

Richard Clark wrote:

> On Tue, 15 Aug 2000 03:43:40 GMT, ehsjr@bellatlantic.net wrote:
>
> >Richard,
> >
> >What am I missing? This is an antenna with negative gain
> >that hears worse in one direction than another, is the devil
> >to build (by comparison to others), is extremely sensistive
> >to the environment, and is difficult, if not impossible, to rotate.
> >
> >Did I get that right? If so, what am I missing? Why would
> >anyone want such an antenna? Is it just the fact that it
> >occupies a small space? I've been trying to figure out what
> >benfits, if any, can be realized with a fractal design. Chip
> >has been completely useless in helping me in this - I hope
> >you can. Thanks!
> >
>
> Hi OM,
>
> All that you say is true, however, it doesn't necessarily disqualify
> an antenna as being useless.
>
> Occupying a small space is an asset to many, having a match is another
> asset. If one is educated to the cost of such assets, then the
> informed Ham can make an educated choice. As I pointed out elsewhere,
> this antenna is probably more suitable for receiving than for
> transmitting if one is terribly conscious of efficiency (which,
> actually doesn't go very far as an argument).
>
> Now as to the matter of being able to turn it. That is a matter not
> of terrible concern to a designer, it being more so the implementor's

> problem. This disconnect may seem brutal, but it is often the case
> that an inventor entirely oblivious to the real needs of his customers
> often finds a less than bright (in the inventor's estimation of
> course) huckster can move these twisted resistors by the carload by
> including a pail of lossy dirt.
>
> Does anyone believe that it is an easier job to fashion an 80M version
> than simply lay ground radials against any handy vertical radiator?
> No, and how many builders to the 10M version are going to tolerate the
> loss of planting a dwarf in their garden a half inch above the soil
> when a six foot elevation would offer so much more? Of course they
> lose the F/B at the cost being able to hear better; they also lose the
> convenient match afforded by the ground providing half the match.
>
> Such a quandary. But if the user has none of these options in the
> first place, the original position seems to glow. Too much attention
> is paid for these concerns, but people are concerned none the less.
> Consider if you worry about a 6 dB loss getting a signal out of the
> antenna; then how do you feel about the 100 dB loss getting a signal
> out beyond 10 miles?
>
> 73's
> Richard Clark, KB7QHC

312. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 04:43:21 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399A1C2F.22BAF674@bellatlantic.net>
Source record: 182604

Fractenna wrote:

>
> The K2 Fractal Flyer still looks like your best option. A low dipole will not
> help.
>

Chip, that's a great idea. He has no antenna now, so the K2 would
guarantee him GREAT comparative performance and earn you the
kudos you want for the antenna. So I propose this: send him the
antenna, along with whatever instructions he needs to put it up, if
he agrees to the idea,and is willing to post his opinion of the
antenna. Then we can all read how well he makes out
on the bands. We will be getting a second ham's opinion of the
antenna, you will be getting the credit that should be associated
with it.

To avoid any cost to you, I'll pay the postage, which I assume
will be well under fifty dollars. I'll go that high, if you and he agree.
Reach agreement here on the NG. Weigh the antenna, and find
out what it will cost to send it to him, post that figure here.
I'll send you a money order for that amount, up to fifty dollars.
When you have the money order in hand, send the antenna to
him. This is not a commercial transaction - neither he nor I am
buying anything from you. It is an experiment, which would
incur expense, and it is that expense that I am addressing.

What say?

>
> 73,
> Chip N1IR

313. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 05:15:50 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8nd826$c1t$18@bashir.peak.org>
Source record: 182605
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

```
: So your saying that tuning an antenna with a swr meter is wrong ..max field
: strength does not guarantee lowest swr .. how can you go wrong by tuningan
: antenna for lowest swr

Here are a couple of examples.

A dummy load has an SWR of 1:1, but it makes a lousy antenna.

Many antennas, without matching networks, are not 50 ohms - matter of fact,
most are not. Now, an antenna radiates the most power when resonant. Let
us assume that the antenna is 25 ohms when resonant. That means, to radiate
the most power, you need to tune for a 2:1 SWR - not 1:1. But how can you
tell this from tuning the antenna to a 100 ohm impedance - which would also
produce that 2:1 SWR? That would be even further from resonace.

In short, SWR meters and field strength meters work well together, but the
SWR meter is necessary only to make sure that your transmitter can couple
safely into the load. Field strength is all that matters - you don't
transmit SWR.

--
Bill Nelson (billn@peak.org)
```

314. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 05:58:42 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <399a2d9e$0$759$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182606

G'day Joe,i have had just abt most of the commerically produced verticle antennas that find their way to VK, i had the first GAP TITAN in VK, some years back,while it is a good antenna,the Butternut series of antennas i find to be a better option,at present i run a HF2V with the TBR160 kit it is ground mounted,4 ground plane wires buried,and works very well,have worked east Coast USA on 160mtrs,good bang for the buck i feel
rgds Dennis.
ps
have had
Titan
DX88
DX77
R5
R7
reckon the HF6V is tops,HB9CQV has been running a HF6V on hia apartment roof for years and i havn't heard him under S7 on PTC2

315. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 06:04:14 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399A2F1C.5C27C2A3@bellatlantic.net>
Source record: 182607
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

The question was how do you measure impedance.
An swr meter does not measure impedance. An swr
meter (more properly, VSWR meter) measures a
ratio of the voltage in the forward direction (ie out
to the antenna) versus the voltage in the backward
direction (ie back into the transmitter, reflected from
the antenna). The bigger the reflected voltage, the
higher the swr. An swr meter, nevertheless, is a good
indicator of whether impedance is matched at 50 ohms,
as you pointed out. It is certainly not the best.

But impedance consists of 3 elements - capacitive
reactance, inductive reactance and resistance.
A true impedance measurement would be expressed
as so many ohms, not as a ratio. And, typically,
one would find expressions that look something like
this: 23 +14 Jx That reading indicates the the
complex impedance consists of 23 ohms resistance
plus 14 ohms inductive reactance. If the expression
were 23 -14 Jx it would mean 23 ohms resistance
plus 14 ohms capacitive reactance.

Now, why is this important? Because you want all
of the power going out to the antenna to "see"
nothing but resistance. In the case of an antenna
with 23 ohms resistance plus 14 ohms inductive
reactance (23 + 14Jx), the only power radiated
by the antenna is the power across the 23 ohms
resistance. The power across the 14 ohms inductive
reactance is wasted. So - you want to get rid of
that +14 Jx, even if it leaves you with 23 ohms,
and an swr worse than 2:1. Why? Simple.
You transform the 23 ohms to 50 ohms. Now there
is no reflected voltage (no reflected power when there
is no reflected voltage) and all of the power reaching
the antenna is radiated, rather than having some of
it wasted in Jx. There are a number of ways to
transform the impedance, at the antenna, to achieve
the maximum radiation of the available power. Pruning
the antenna (cutting the wires smaller and smaller while
observing the swr reading getting closer and closer to 1.1
to 1) is one example. In a beam antenna (which would
have an impedance in the low to mid 20's with some
Jx reactance as in teh example expressions I used) a

typical transformation AND elimination of the Jx is
accomplished with a gamma match. A gamma match
includes a transmission line transformer (which introduces
+ Jx (inductance) AND transforms the resistance from
23 ohms to 50 ohms) and a capacitor. The capacitor
introduces -Jx. The +Jx is unavoidable, as it is necessary
to attach the feed line to the center of the element and to
some point away from the center to achieve 50 ohms
resistance. The length of wire that allows attaching the
center conductor of the feed line (the shield is attached
at the center) to the 50 ohm point somewhere out on
the element away from the center introduces the extra
inductance - the +Jx. Now, if you have an accurate
impedance measurement and know how much inductive
reactance has been added to get to 50 ohms resistance,
you can compute the value of capacitance needed to
produce an equal amount of - Jx. Finally, in all cases
above where the term resistance was used, the correct
term is radiation resistance. I won't get into a discussion
of that here, other than to say that it indicates that the
signal it (the radiation resistance) "sees" is the signal
it radiates out of the antenna. It is not the same as
the resistance we talk about at the electronic component
level, The signals those resistances "see" are converted
to heat, not radiated.

That is important stuff if you want to really make your
antennas perform well. The simplest concept is this:
you can get a good match (ie swr is 1.1 to 1) and have
a lousy radiator. If you had, for example, 1 ohm of
radiation resistance plus 49 ohms of inductive reactance, then
most of your signal would be converted to heat in the
inductor - only about 2 percent would be radiated.
Clearly, you would want it to be the other way around!
So, that's why there needs to be a distinction made
that swr meters do not measure impedance.

WildBill wrote:

> sideband a swr meter is how you measure if it is 50 ohms or not ... 50 ohms
> would be a 1:1.1 swr , 100 ohms would be a 2:1 swr as well as 25 ohms would
> be a 2:1 swr ... trim each end the same or add the same to each side to
> get your swr down to which every frequency is of your interest..
>
> "sideband" <sideband@cac.net> wrote in message
> news:3998450D.E150C5AB@cac.net...
> > Doc:
> >
> > Thanks for this.
> >
> > Another question, now... If the impedance isn't 50 ohms (how do you

> > measure this, anyway?) What would my options be to get it matched up?
> >
> > TIA
> >
> > -SSB
> >
> >

316. Antenna from ON4UN book!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 23:06:00 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <y8Fm5.31$qf%1.1704019@news.jazztel.es>
Source record: 182534

First of all, greetings from a new newsgroup list user!

I am reading the ON4UN book, and I've been thinking about building one antenna for 160 and 80 he mentions on the book.

The antenna would be 27 meters tall, and its four *elevated* radials would measure 27 meters too. All the antenna would be made of 2 mm wire. The antenna schema at the book does not speak about something more to be put at the antenna (not top loading or so on).

For 80 meters, the system would be 60 degrees long, so it's short by 120 degrees for 1/2 wavelenght. Too short-> put a coil, please!

For 160 meters, it would be 30 degrees long, so being short of 150 degrees for 1/2 wavelenght. Too short -> put a bigger coil!

The questions are simple... how could I calculate the right values for the capacitor and the coil needed to put the system to matched impedance?

Thanks in advance, and 73!

Fidel Leon - EA3GIP
ea3gip@pobox.com

317. Re: Antenna from ON4UN book!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-16 23:13:40 UTC
From: Fidel Leon <ea3gip@pobox.com>
Message-ID: <TfFm5.32$qf%1.1900608@news.jazztel.es>
Source record: 182535

"Fidel Leon" <ea3gip@pobox.com> escribi&#65533; en el mensaje news:...
> First of all, greetings from a new newsgroup list user!
>
> I am reading the ON4UN book, and I've been thinking about building one
> antenna for 160 and 80 he mentions on the book.
>
> The antenna would be 27 meters tall, and its four *elevated* radials
would
> measure 27 meters too. All the antenna would be made of 2 mm wire. The
> antenna schema at the book does not speak about something more to be put
at
> the antenna (not top loading or so on).
>
> For 80 meters, the system would be 60 degrees long, so it's short by 120
> degrees for 1/2 wavelenght. Too short-> put a coil, please!
>
> For 160 meters, it would be 30 degrees long, so being short of 150
degrees
> for 1/2 wavelenght. Too short -> put a bigger coil!
>
> The questions are simple... how could I calculate the right values for
the
> capacitor and the coil needed to put the system to matched impedance?
>
> Thanks in advance, and 73!
>
> Fidel Leon - EA3GIP
> ea3gip@pobox.com
>
>
>
>
>

318. SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: mthompson14@yahoo.com
Message-ID: <399c0329.14827743@news-server>
Source record: 182469

Hello,

Can anyone help me on how I would go about making an SWR meter for the VLF and LW range. I have a radio shack SWR that is good over 3-30 Mhz, with one watt applied but is it possible to make one with a freq range of say 1Khz to 500Khz? With less then a watt applied power?

Thanks
Mike T.

319. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399BF12D.7D5A@pacbell.net>
Source record: 182470
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy Lewallen wrote:

(snip)

> It is clear, though, that meters which
> have never been measured are always perfectly accurate.
>

(snip)

> Roy Lewallen, W7EL
>

This is very true. I made the mistake of building a
step attenuator and using it to check the accuracy of the S
meter on my Japanese rig. I haven't been able to trust that dang
S meter since.

Tom Donaly KA6RUH

320. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399BF274.7215@pacbell.net>
Source record: 182471
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Tom W8JI wrote:
>
> On Thu, 17 Aug 2000 00:27:44 GMT, ehsjr@bellatlantic.net wrote:
> >bar graph on the LCD display). The same ham who
> >performed the second test on my Uniden - he also
> >uses an HP 608 D - tested his 756 and found it was
> >slightly off in the wattmeter. I do not remember whether
> >he tested the S meter, but my bet is he did. He is quite
> >meticulous about those things. If he did test it, he would
> >surely have told me if the S-meter was off.
>
> Amazing. The 756 I had was a mile off. The scale wasn't even close to
> correct at the low end, although with the preamp off it was about 55
> microvolts at S 9.
>
> Once in a while a certain rig of a certain model pops up that
> apparently is accurate. Too bad the manufacturers can make most of
> them that way.
>
> I've got 7 radios sitting here in this room, and not one is correct.
> Most of them don't even have the scale marked "correctly", and because
> of that can NEVER be calibrated to anything other than 5 dB or less
> per S unit.
>
> Shame on Icom and Drake for being so stupid they marked the scales
> wrong, having the same change in meter current below S-9 being 5 dB
> per S unit instead of 6, when compared to the dB markings on the
> meters!
>
> I guess thy must use a complex external circuit to make meter
> sensitivity change at S-9 to a entirely new slope, to make up for the
> engineering mistake on the scales.
>
> Collins also.
>
> 73 Tom

You're a radio engineer, Tom. What would you do to make an
accurate S meter, or even and S meter accurate?

Tom Donaly KA6RUH

321. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399C0F7B.1AA1A115@haertig.com>
Source record: 182472

All of what you say is true, too, Bart! However, it is not the voltage ACROSS the tank circuit that is responsible for driving the current into the antenna.

In this sub-thread there was a question as to whether the current through the tank was phase shifted, followed by a subsequent discussion of the phase relationship between the voltage and the current in the tank circuit. It is important to note that, while it the voltage across the tank may indeed be shifted in phase relative to the current through the tank, this does not imply that there has been any phase shift in the current, and, because the voltage ACROSS the tank isn't responsible for driving the current in the upper element, its phase relative to the current is immaterial.

Have I got that right?

Gray

Bart Rowlett wrote:
>
> Gray Frierson Haertig wrote:
> >
> > Hey Richard,
> >
> > All you say is true! However, the voltage ACROSS the two terminal
> > network in the tank implementation of the collinear antenna is
> > immaterial as it is not responsible for driving
> > any current into the elements.
>
> OhOh, gotta be careful here. The voltage is what actually causes the
> current to flow into the finite impedance of the upper radiator. The
> problem could be stated:
>
> 1) What must the voltage (complex) be at the upper terminal of the phase
> inverter in order to induce the specified current (complex) flow into
> the upper element?
>
> 2) How can I design a phase inverter which supplies the necessary
> voltage _and_ current into the load (upper element)?
>
> bart
> wb6hqk

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.

820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

322. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: redberd95@aol.comnospam
Message-ID: <20000817121425.07442.00000031@ng-fh1.aol.com>
Source record: 182473

I should have added that I was looking for a multiband design (and stealth). I was thinking about this after seeing an ad for the B&W end fed Inverted Vee multiband antenna.

Randy

323. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <399C069B.6CFBED28@GTE.net>
Source record: 182474

mthompson14@yahoo.com wrote:

> Hello,
>
> Can anyone help me on how I would go about making an SWR meter for
> the VLF and LW range. I have a radio shack SWR that is good over 3-30
> Mhz, with one watt applied but is it possible to make one with a freq
> range of say 1Khz to 500Khz? With less then a watt applied power?
>
> Thanks
> Mike T.

At least in the earlier ARRL Handbooks there is a resistive bridge for VSWR- these work well for freq up thru UHF if properly laid out. Very sensitive. They are absorptive, so cannot be left in line.
Dale W4OP

324. Re: YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399C1639.17C28451@bellatlantic.net>
Source record: 182475

Ian,

That's a great site! I found "stacking" in the index.
It refers to the 8/93 and the 4/00 issues. Are they
available online?

"Ian White, G3SEK" wrote:

> KC8LVJ wrote:
> >I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
> >the 6 Meter has a 6 foot beam. tower is 48 ft tall.
> >Question: what should be minimum spacing between the two to avoid
> >conflict?????
>
> At least half the spacing that the manufacturers of the 6m yagi
> recommend for stacking two of those yagis. For the reasons why, see my
> web site.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

325. Re: How precise must a wire antenna be?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: M1nn0w <1c3d0g@att.net>
Message-ID: <jKUm5.61508$RG6.3211011@bgtnsc05-news.ops.worldnet.att.net>
Source record: 182476
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

This is somewhat "Off Topic" but it brings up a question that I've always wondered about. Can one use Ladder line on a sided house with storm windows???? I understand that the desire is to keep the line away from metal whenever possible.

Thanks ..... John

jh-lewis wrote in message ...
>The antenna they call a G5RV is simply a dipole antenna, 102' feet long,
>with about 32' of ladder line feed in. Some people attach the ladder line
>to coax and bring that into the shack, some just feed the ladder line into
>the shack - I've tried both and settled for just using the ladder line to
my
>tuner...works like a champ.

326. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <spo5ak46r5j58@corp.supernews.com>
Source record: 182477

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:399bee5d.23347278@news.akorn.net...
> I've never seen a Penolic dielectric barrel connector, but of course
> there are a large variety of connectors manufactured.

I have a few. Where I got them at I can't remember.

> A common trick, if you have a critical application, is to drill out
> most of the dielectric in a standard connector. Pretty much needless
> at lower frequencies, but in critical applications it can make a
> difference at upper VHF and higher.

Never heard of this being done. I will have to keep this one in my notes
files

>> Remember that the above results are calculated for a
> >"Z bump" of 1.25 inches, a much longer connector, such as the long
bulkhead
> >ones I have seen at Ham swaps, can cause SWR problems even at HF!
>
> I've never seen that, and I use plenty of bulkhead connectors. It
> would take almost a foot long female connector to cause a problem at
> ten meters, or a bunch of shorter bumps placed at stratigic spots in
> the line. Even so, the effect on loss would be low.

The ones I have seen are 2 to 3 inches long to as much as a foot and a
half!!

> By far the biggest worry is some connectors, like those from Radio
> Shack, overheat at high power levels (over 1000 watts) during extended
> transmissions.

The ones I see at my local Rat-Shack are made by Amphenol, and use Teflon
dielectric. These are a problem at high power levels?

> Anyone using N connectors in QRO applications is asking for trouble.
> Especially if SWR might ever get high.

I remember a thread, on this NG, some months back about how much power a "N"
connector can handle. I don't recall anyone ever finding a spec for a given
manufacture's connector.

--
Leland C. Scott
KC8LDO

327. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <399C1D11.FEC25464@west.raytheon.com>
Source record: 182478

Gray Frierson Haertig wrote:
>
> All of what you say is true, too, Bart! However, it is not the voltage
> ACROSS the tank circuit that is responsible for driving the current into
> the antenna.

But it is...

Assume the voltage at the top of the lower dipole element is known.

Determine the current which must flow between the upper radiator and the phase inverter. This current can be directly computed from the required power flow between the lower and upper elements once the voltage is known with respect to the 'third terminal reference'.

Determine the current which must flow between the phase inverter and the upper element. We have already covered the polarity; the optimum magnitude depends on the impedance of the upper radiator but will likely be comparable to the current 'extracted' from the lower element.

The required current (complex) into the upper element is now known. The voltage required to force the required current into the upper radiator is simply the current times the endpoint feed impedance with respect to the 'third terminal reference'. Computation of the endpoint feed impedance requires knowledge of the conductor dimensions and the mutual impedance with the lower element along with various environmental factors.

The input voltage, output voltage, input current and output current, all complex quantities, are now known. The objective is to design a phase inverter which meets all four constraints, or at least comes close enough.

Establishing the correct difference between the input voltage and output voltage of the phase inverter is the primary design objective of the phase inverter.

The voltage across the phase inverter is what forces the current in the upper element to the correct magnitude and phase.

bart
wb6hqk

328. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22573-399C16C7-35@storefull-114.iap.bryant.webtv.net>
Source record: 182479

Mike T. wrote:
"Can anyone help me on how I would go about making an SWR meter for VLF and LW range?"

This isn`t something you would do with a slotted (trough) line or even Lecher wires. The wavelength is too long.

The problem of determinig impedance, reflection, matching, or whatever you are up to is simplified by wavelengths which are long compared with the electrical parts you can use.

You would do well to get a copy of "Test Equipment for the Rafio Amateur" by H.L. Gibson, G2BUP, and published by the Radio Society of Great Britain. ARRL may resell these in the U.S.A..

There are probably several ways to get the information SWR might provide. The recommended book would give some ideas as to the complexities of the possibilities.

Best regards, Richard Harrison, KB5WZI

329. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22573-399C1BE6-36@storefull-114.iap.bryant.webtv.net>
Source record: 182480

Gray Frierson Haertig wrote:
"Have I got that right?"

We have one generator driving series-connected elements. The circuit is completed in the space around the elements. There is one current through the series circuit and the voltages across reactances and resistances have to equal in their total the generator voltage magnitude. These are vectors.

Best regards, Richard Harrison, KB5WZI

330. Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: jack albert <jwa@tellabs.com>
Message-ID: <w7Vm5.14$0z3.205@wdc-read-01.qwest.net>
Source record: 182481

Trying to purchase a new house without Antenna restrictions or covenants is really difficult and
I'm a little bit confused on the FCC policies concerning the private contractual agreements.
(I snipped the FCC's comments on a petition that was presented by the ARRL)

I was told by a real-estate agent that restrictions and covenants are similar to leans against the property and
are held as public record at the County Dead Office. They are not signed by or agreed to by persons that
purchase the property. They are adopted by the land developers and I guess you can that they are policed
by the Home Owners Associations!

If I purchase the property and pay cash for it but I don't sign the covenant or agreement. How can that be an
agreement between two parties and how can I be restricted by the covenants?

----------SNIP----------

Federal Communications Commission DA 99-2
Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)

Modification and Clarification of Policies and)
Procedures Governing Siting and Maintenance) RM-8763
of Amateur Radio Antennas and Support)
Structures, and Amendment of Section 97.15)
of the Commission's Rules Governing the)
Amateur Radio Service.)

ORDER

Adopted: November 18, 1999 Released: November 19, 1999
By the Deputy Chief, Wireless Telecommunications Bureau:

-----SNIP---------
-----SNIP---------

III. Discussion
6. The Commission's policy with respect to restrictive covenants is clearly stated in the MO&O establishing a limited preemption of state and local

regulations. In the MO&O, the Commission stated that PRB-1 does not reach restrictive covenants in private contractual agreements.17 The Petitioner argues
that enforcement of a covenant by the court constitutes "state action", thus converting what otherwise would be a private matter into a matter of state regulation and, thus, subject to the Commission's limited preemption policy.18
Notwithstanding the clear policy statement that was set forth in PRB-1 excluding restrictive covenants in private contractual agreements as being outside the reach of our limited preemption,19 we nevertheless strongly encourage associations of homeowners and private contracting parties to follow
the principle of reasonable accommodation and to apply it to any and all instances of amateur service communications where they may be involved. Although we do not hesitate to offer such encouragement, we are not persuaded
by the Petition or the comments in support thereof that specific rule provisions bringing the private restrictive covenants within the ambit of PRB-1
are necessary or appropriate at this time. Having reached this conclusion, we
need not resolve the issue of whether, or under what circumstances, judicial enforcement of private covenants would constitute "state action."

-----SNIP---------

331. Re: Returned mail: see transcript for details

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: wgewald@att.net
Message-ID: <20000817172351.RCLE14052.mtiwmhc27.worldnet.att.net@webmail.worldnet.att.net>
Source record: 182482

Rob:

This is bizarre. No wonder there is
almost no traffic in fractalantenna. We are looking at
real paranoia at work here. Any co-moderator would just
be one of Cohen's other personalities, I guess. This is
getting as scary as the Bate's Motel.

Bill
==========
Chip,

Please forgive me if my 'nettiquette' is all screwed up.
I'm learning as I go. My method is to listen before
speaking
> (works on the air; should work
here!). I've not had any
> exposure to training. :)
>
> My recent posts were aimed at the
other hams in the group,
> much more than at yourself. Because
I have no intention of
> seeking conversation about these
antennas anywhere except
> this list, I begin to realize that
such conversation must
> also be of interest to you!
>
> I completely respect your right to
omit any traffic you
> wish, without the need to explain
why. I also have no
> problem with your slicing out major
pieces of text, on
> grounds of irrelevance... I do tend
to the verbose end of
> the scale. "moderate" easily
includes "edit". Am I wrong to
> hope that some traffic, or portions
thereof, will be let
> through without comment? My
assumption then would be that
> any civilized and constructive
replies might also be posted.

> Otherwise, we are all just speaking
to you and not to the
> "List".
>
> It pleases me to draw the
distinction between posts that I
> have addressed to you, as Chip or
N1IR, and the relevant
> last two or three that had no
greeting at the top and were
> therefore addressed to all hams in
the group. I wish not to
> "ROB" you of the pleasures of
moderating this group. Such
> simple pleasures may not always
exceed the hard work it
> takes to constantly pay attention to
it. Similarly, I truly
> hope the appearance of a "CHIP" on
your shoulder was
> inadvertent. :)
>
> However, when you reply that "...you
weren't born
> yesterday", I have failed. It seems
to me you may have
> believed I was addressing my
reaction to your patent to you
> personally. Please let me explain.
>
> Except for the congratulations, and
the clearest level of
> respect that I know how to place
into prose, most of my
> reaction to the patent was addressed
to other hams. I was
> trying to anticipate the fact that
you have probably had
> just quite enough of the USPTO. I
was trying to help other
> hams to do the study for
themselves. I was trying thereby
> to keep them off your back. Please
correct me where
> necessary, especially in the matter
of how my comments
> appear relative to yourself vs. all
the rest of us in the
> list.
>

> 73 -- Rob
> W4ROB
>
> Send SASE with three stamps. I
certainly will! ...and I
> really don't see why you should feel
any need to discuss the
> patent. Let us hams do with it as
best we can. Recruit a
> co-moderator (eGroups supports such)
and share the duty?
> Pick us up only when we fall off the
mountain :)
>
>
>
>

-----<e|-
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>

-----|e>-
>
>

--
Posted from mtiwmhc27.worldnet.att.net [204.127.131.52]
via Mailgate.ORG Server - http://www.Mailgate.ORG

332. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Alan Melia <Alan.Melia@btinternet.com>
Message-ID: <8nh91j$or5$1@neptunium.btinternet.com>
Source record: 182483

I have looked at some of the replies......can I suggest that an SWR meter is not going to be a lot of use.....very few aerials are 50ohms. and most of the resistance in LF aerials is ground loss. A simple bridge is probably more use. Noise bridges have been modified for LF quite successfully......see the links on the LWCA and AMRAD sites for some good info.
Cheers de Alan G3NYK
mthompson14@yahoo.com wrote in message <399c0329.14827743@news-server>...
>Hello,
>
> Can anyone help me on how I would go about making an SWR meter for
>the VLF and LW range. I have a radio shack SWR that is good over 3-30
>Mhz, with one watt applied but is it possible to make one with a freq
>range of say 1Khz to 500Khz? With less then a watt applied power?
>
>Thanks
>Mike T.
>

333. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Richard Currin <Richard_Currin@ncsu.edu>
Message-ID: <399BE187.17188190@ncsu.edu>
Source record: 182484
Cross-posted to: alt.comp.hardware.homebuilt,alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.basics,sci.engr.safety,sci.geo.meteorology

Since my last post we have had an APC UPS with phone protection fail. It
pulled the phone line down.

Andy Dingley wrote:

> Richard Currin <Richard_Currin@ncsu.edu> a ï¿½crit :
>
> >We have had several
> >pieces of equipment damaged by lightning that were "protected" by APC.
>
> I had an APC whose charger went crazy and the resulting spill of
> boiled-off acid took a hole out of the office carpet ! Monday morning
> we'd lost the server, and we hadn't even had power problems.
>
> APC were of no use whatsoever when we complained -- it's the last one
> of theirs that I'll buy.

--
- Richard Currin
Facilities Agricultural Engineer I
University Field Labs, NC State University
Phone: (919) 515-2823 Email: richard_currin@ncsu.edu

334. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8nhf1vjcd1@nnrp1.deja.com>
Source record: 182485

I wish I could know that something would work just because I built it. Unfortunately, my skills are of an inferior sort, and I generally have to fire it up and test it after I build it to make sure it works. I don't at all doubt THAT Tom's collinear worked with coils with pendant 1/4 waves and not without them, I'm just looking for some practical tests that reasonably prove whether a given collinear implementation is working or not. I, too, have built collinears, and my tests have told me that they work sensibly as the simulation beforehand told me they would.

Thanks to Roy for the simulation work he did & posted on this. To me, it's clear that a simple two-terminal network won't do for coupling the end elements to the driven element, and I'm not surprised that the perpendicular quarter wave stub DOES work. But it's not clear to me just how well the coils typically used in, for example, the cell phone car antennas do their purported job. Those coils are generally a significant fraction of a wavelength long...one I measured this morning is rougly 1/8 wave long, and a significant diameter. Same with a commercial 440 antenna I have that purports to be a collinear. That's large enough, and the coil is near enough to the fields of the driven element, that I can imagine that it does SOMETHING more than just a two-terminal network. Indeed, it at least serves to space the coupled element significantly further from the driven element, lowering the mutual impedance between those two. -- I wonder if NEC could do a reasonable job on a straight-line segmented approximation of such a coil, maybe with "square" turns, spaced about 4 wire diameters turn-to-turn.

Cheers,
Tom

In article <399931bf.8620062@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> On Mon, 14 Aug 2000 22:07:04 GMT, tom_bruhns@agilent.com wrote:
>
> >OK...the discussions I've seen here (and been a part of) have offered
> >various explanations about what's going on, or what people think is
> >going on. (Or what people know MUST be going on! :-) How about some
> >_measurements_? HOW do you know that the quarter wave stub worked?
HOW
> >does W8JI know that a coil with a perpendiular quarter wave wire
> >attached to its center tap works, but that the same antenna minus the
> >quarter wave wire does not give the desired collinear results?
>
> Because I built one, about 25 years ago.

>
> It was part of a phase I went through, when I was trying to use the
> 300 feet of space between a couple big Cottonwood trees over a clear
> field for 40 meter and 80 meter systems.
>
> 73 Tom
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

335. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8nhfitjtp1@nnrp1.deja.com>
Source record: 182486

Let's see here... "current...is retarded by 180 degrees." So...there
are two terminals of the stub that connect to the driven element and the
collinear undriven element. Let's say that current goes into one the
one connected to the driven element. That means that, with the 180
degree retardation, current also goes into the one connected to the
collinear element. But now what you have is not transmission line
currents, but common mode currents, on the stub. Do you think that's
what happens? It's not what Roy's simulation tells us, and it's not
consistent with what I read in books I trust on the subject: they
both say that there is a SMALL common mode (antenna) current on the
stub, and a relatively LARGE excitation of the transmission line
currents, causing a LARGE voltage drop across the open end of the
stub. Indeed, in that case, the current in one wire of the stub is
very nearly equal to the current out of the other wire, but not
exactly equal.

Cheers,
Tom

In article <26443-399BE1B2-3@storefull-118.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Tom, W8JI wrote:
> "A stub can have a third terminal from its somewhat low common mode
> impedance---."
>
> I think 1/4-wave short-circuit stubs used to couple colinear elements
in
> an array are working as 1/2-wavelengths of wire which don`t
> radiate to mess-up the pattern. Current traveling through
1/2-wavelength
> of wire is retarded by 180 degrees.
>
> Best regards, Richard Harrison, KB5WZI
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

336. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <399C405D.9B270B61@amsat.org>
Source record: 182487

Go to www.eham.com
They have quite a forum on CCC&R's, and a lot of resources.
Unfortuneately, until the FCC gets off its duff, there isn't much we can
do.
73, Jim

337. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <399C426C.F2B3793C@amsat.org>
Source record: 182488

Amphenol rates their type-N at 1500 Volts, peak, and their type-UHF at
500 Volts, peak.
No mention of power handling in the catalog.
Regards, Jim

338. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8nhh38$lu9$1@nnrp1.deja.com>
Source record: 182489

Something that I think is being missed here... in a collinear with currents in the upper and lower element like we want them for gain, the currents are in phase. When the current is top-to-bottom in one element, we want it top-to-bottom in the other element. What you actually get in an antenna where you replace the phasing stub (or whatever) by a straight wire--in other words, just connect the collinear element to the driven element--is current that goes _nearly_ to zero (but not quite) at that junction, and a short distance away is essentially 180 degrees out of phase with the current in the other element. So, in effect, having NO "phase-inverting" network at that point results in a phase inversion. In fact, if you replace the connection with a short gap, an insulator, you STILL get that phase inversion from the driven to the collinear element.

How DO you get the phases to be the same? You must provide excitation of the mode where the currents are the same phase (direction) in both elements, and enough excitation to overcome the excitation that results from the mutual impedance between the two elements. Now, consider that there is some magnetic coupling and some capacitive coupling from one element to the next, and together they result in the mutual impedance. WHAT IF you could arrange to put a high voltage between the adjacent ends? Yes, that's the voltage that Bart has been talking about, and that Gray (sorry Gray) suggested might not matter. If there's a high voltage, that high voltage will cause a current in the capacitance that exists between the adjacent ends of the elements, and THAT CURRENT _must_ flow in the ends of the wires, connecting to that voltage source. Draw it out, and you'll see that you then end up with current in the same direction in each element, which is just what you want for collinear gain. So if you can make the voltage high enough between the ends, you will force the mode you want.

How do you get that voltage? One way is with the quarter wave stub which couples to the field of the driven antenna in a way that transmission line currents are excited on it. One way to NOT do it is to put a resonant tank there which does not couple to the field of the antenna. One way to NOT do it is to make the quarter wave stub collinear/coaxial with one of the antenna elements. But...if you use a coil which is physically large and arranged properly (if there is such an orientation) to couple to the driven element, that MAY give reasonable collinear performance.

Cheers,
Tom

In article <399C1D11.FEC25464@west.raytheon.com>,
Bart Rowlett <BHRowlett@west.raytheon.com> wrote:
>
>
> Gray Frierson Haertig wrote:
> >
> > All of what you say is true, too, Bart! However, it is not the
voltage
> > ACROSS the tank circuit that is responsible for driving the current
into
> > the antenna.
>
> But it is...
>
> Assume the voltage at the top of the lower dipole element is known.
>
> Determine the current which must flow between the upper radiator and
> the phase inverter. This current can be directly computed from the
> required power flow between the lower and upper elements once the
> voltage is known with respect to the 'third terminal reference'.
>
> Determine the current which must flow between the phase inverter and
> the upper element. We have already covered the polarity; the optimum
> magnitude depends on the impedance of the upper radiator but will
> likely be comparable to the current 'extracted' from the lower
> element.
>
> The required current (complex) into the upper element is now known.
> The voltage required to force the required current into the upper
> radiator is simply the current times the endpoint feed impedance with
> respect to the 'third terminal reference'. Computation of the
> endpoint feed impedance requires knowledge of the conductor dimensions
> and the mutual impedance with the lower element along with various
> environmental factors.
>
> The input voltage, output voltage, input current and output current,
> all complex quantities, are now known. The objective is to design a
> phase inverter which meets all four constraints, or at least comes
> close enough.
>
> Establishing the correct difference between the input voltage and
> output voltage of the phase inverter is the primary design objective
> of the phase inverter.
>
> The voltage across the phase inverter is what forces the current in
> the upper element to the correct magnitude and phase.
>
> bart
> wb6hqk
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

339. Re: YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <nDha7BAm+Cn5EwBi@ifwtech.demon.co.uk>
Source record: 182490

>Ian,
>
>That's a great site! I found "stacking" in the index.
>It refers to the 8/93 and the 4/00 issues. Are they
>available online?
>

No, but that and more information is on the web pages you've already
seen.

Eventually RSGB will get all the old 'In Practice' columns online, and
as they do, I'll provide links from my site.

>"Ian White, G3SEK" wrote:
>
>> KC8LVJ wrote:
>> >I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
>> >the 6 Meter has a 6 foot beam. tower is 48 ft tall.
>> >Question: what should be minimum spacing between the two to avoid
>> >conflict?????
>>
>> At least half the spacing that the manufacturers of the 6m yagi
>> recommend for stacking two of those yagis. For the reasons why, see my
>> web site.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

340. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399C4A9C.362C03F6@eznec.com>
Source record: 182491

For 1 amp at zero degrees at the base of the antenna, EZNEC shows the current into the lower stub wire as 0.265 amps at -115.5 degrees, and into the upper wire as 0.363 amps at -55.9 degrees. Unless I did the math wrong (a distinct possibility), this represents a differential mode current of 0.162 amps and a common mode current of 0.274 amps. Notice that the currents are only 60 degrees apart, nowhere near the 180 degrees of pure differential mode current.

For anyone else interested in doing this simulation, be sure to pay attention to the direction of current flow and how you've defined your wires. Positive current flow in all MININEC and NEC-2 programs is defined as being in the direction from end 1 to end 2 of the wire. It's easy to get an inadvertent and spurious apparent 180 degree shift if you're not careful.

Roy Lewallen, W7EL

tom_bruhns@agilent.com wrote:
>
> Let's see here... "current...is retarded by 180 degrees." So...there
> are two terminals of the stub that connect to the driven element and the
> collinear undriven element. Let's say that current goes into one the
> one connected to the driven element. That means that, with the 180
> degree retardation, current also goes into the one connected to the
> collinear element. But now what you have is not transmission line
> currents, but common mode currents, on the stub. Do you think that's
> what happens? It's not what Roy's simulation tells us, and it's not
> consistent with what I read in books I trust on the subject: they
> both say that there is a SMALL common mode (antenna) current on the
> stub, and a relatively LARGE excitation of the transmission line
> currents, causing a LARGE voltage drop across the open end of the
> stub. Indeed, in that case, the current in one wire of the stub is
> very nearly equal to the current out of the other wire, but not
> exactly equal.
>
> Cheers,
> Tom
>
> In article <26443-399BE1B2-3@storefull-118.iap.bryant.webtv.net>,
> richardharrison@webtv.net (Richard Harrison) wrote:
> > Tom, W8JI wrote:
> > "A stub can have a third terminal from its somewhat low common mode
> > impedance---."
> >
> > I think 1/4-wave short-circuit stubs used to couple colinear elements

> in
> > an array are working as 1/2-wavelengths of wire which don`t
> > radiate to mess-up the pattern. Current traveling through
> 1/2-wavelength
> > of wire is retarded by 180 degrees.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
> >
>
> --
> Tom Bruhns -- K7ITM
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

341. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <399c5bb2_2@news2.one.net>
Source record: 182492

"jack albert" <jwa@tellabs.com> wrote in message
news:w7Vm5.14$0z3.205@wdc-read-01.qwest.net...
> Trying to purchase a new house without Antenna restrictions or covenants
is
> really difficult and
> I'm a little bit confused on the FCC policies concerning the private
> contractual agreements.
> (I snipped the FCC's comments on a petition that was presented by the
ARRL)
>
> I was told by a real-estate agent that restrictions and covenants are
> similar to leans against the property and
> are held as public record at the County Dead Office. They are not
signed
> by or agreed to by persons that
> purchase the property. They are adopted by the land developers and I
guess
> you can that they are policed
> by the Home Owners Associations!
>
> If I purchase the property and pay cash for it but I don't sign the
covenant
> or agreement. How can that be an
> agreement between two parties and how can I be restricted by the
covenants?
>

Jack:

The covenants became part of the deed when it was filed with the county. When you purchase the property, you purchase the deed, and the covenants go along with it. A lawyer would word that differently, but that's basically how it works. You cannot claim that you didn't agree to the covenants; you have joined in the agreement.

Be careful about what real estate agents tell you. When I purchased my current house about four years ago, I found that I knew MANY things about property sale and ownership that the realtors didn't know. I had considerable difficulty explaining the issues of antennas and covenants to my agent. And on a different issue of liability and insurance, I finally had to tell the skeptical agents (mine and the seller's) that what I was telling them was correct and that I had to have things my way. When we got to the settlement with a lawyer presiding, the seller's agent asked about what I had told them, and the lawyer said "Of course". The agents were much surprised and asked me not to tell anyone about it (really!).

Don't try to be your own lawyer, and don't accept that realtors know the law -- not even property-related law.

... Rich W2RG

342. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <399C6384.1B58D959@west.raytheon.com>
Source record: 182493

Roy Lewallen wrote:
>
> For 1 amp at zero degrees at the base of the antenna, EZNEC shows the
> current into the lower stub wire as 0.265 amps at -115.5 degrees, and
> into the upper wire as 0.363 amps at -55.9 degrees. Unless I did the
> math wrong (a distinct possibility), this represents a differential mode
> current of 0.162 amps and a common mode current of 0.274 amps.

Looks reasonable to me.

The voltage at the lower stub wire should be around -90 degrees with
respect to the excitation current. The difference between the voltage
phase and the current phase is the phase angle of the power transfer
from the lower element into the phase inverter. I believe the minimum
common mode current, and therefore stub radiation, occurs when the
phase inverter input and output phase angles are both zero.

bart
wb6hqk

343. Online Homebrew Aerial Projects

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: brian smith <bri1@btinternet.com>
Message-ID: <8nhpoqjbi1@neptunium.btinternet.com>
Source record: 182494

Hi. I have just posted my latest aerial project on my website.
It is the most simple , effective antenna system possible for 1.8 to 30 MHz
use , and is suitable for tx as well as rx.
The system consists of an L Match antenna Tuner and 132 feet of wire.
Details , circuit and construction pics at my website. Find AERIALS &
ANTENNAS then click the "L Match Basic A.T.U." icon!
Have fun and enjoy !! :)
bri g0ier

http://www.bri1.btinternet.co.uk

344. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <399C6B76.4B4F38F8@usa.alcatel.com>
Source record: 182495

Check out the FCC's Web page. The Commission has preempted both CC&R's and zoning where they prevent reception of over-the-air television signals. It has done so for antennas which mount either on an owners property, or in the area of which a renter has use by reason of his tenancy.

However, the preemption extends to antennas which (If I recall correctly) extend no more than 12 feet above the roof line. An attorney acquaintance of mine, who is with the ARRL volunteer counsel program, tells me you will have to actually show the antenna has use for television to avail yourself of the preemption. He was not acting as my attorney at the time, and I am not an attorney either; this is naturally NOT legal advice.

But it may hold out some hope for you.

Cheers,

Cortland
(ka5s@saber.net)

jack albert wrote:

> Trying to purchase a new house without Antenna restrictions or covenants is
> really difficult and
> I'm a little bit confused on the FCC policies concerning the private
> contractual agreements.
> (I snipped the FCC's comments on a petition that was presented by the ARRL)
>
> I was told by a real-estate agent that restrictions and covenants are
> similar to leans against the property and
> are held as public record at the County Dead Office. They are not signed
> by or agreed to by persons that
> purchase the property. They are adopted by the land developers and I guess
> you can that they are policed
> by the Home Owners Associations!
>
> If I purchase the property and pay cash for it but I don't sign the covenant
> or agreement. How can that be an
> agreement between two parties and how can I be restricted by the covenants?
>
> -------------SNIP--------------
>
> Federal Communications Commission DA 99-2
> Before the
> Federal Communications Commission
> Washington, D.C. 20554
>

> In the Matter of)
>)
>
> Modification and Clarification of Policies and)
> Procedures Governing Siting and Maintenance) RM-8763
> of Amateur Radio Antennas and Support)
> Structures, and Amendment of Section 97.15)
> of the Commission's Rules Governing the)
> Amateur Radio Service.)
>
> ORDER
>
> Adopted: November 18, 1999 Released: November 19, 1999
> By the Deputy Chief, Wireless Telecommunications Bureau:
>
> -----SNIP---------
> -----SNIP---------
>
> III. Discussion
> 6. The Commission's policy with respect to restrictive covenants is
> clearly stated in the MO&O establishing a limited preemption of state and
> local
> regulations. In the MO&O, the Commission stated that PRB-1 does not reach
> restrictive covenants in private contractual agreements.17 The Petitioner
> argues
> that enforcement of a covenant by the court constitutes "state action", thus
> converting what otherwise would be a private matter into a matter of state
> regulation and, thus, subject to the Commission's limited preemption
> policy.18
> Notwithstanding the clear policy statement that was set forth in PRB-1
> excluding restrictive covenants in private contractual agreements as being
> outside the reach of our limited preemption,19 we nevertheless strongly
> encourage associations of homeowners and private contracting parties to
> follow
> the principle of reasonable accommodation and to apply it to any and all
> instances of amateur service communications where they may be involved.
> Although we do not hesitate to offer such encouragement, we are not
> persuaded
> by the Petition or the comments in support thereof that specific rule
> provisions bringing the private restrictive covenants within the ambit of
> PRB-1
> are necessary or appropriate at this time. Having reached this conclusion,
> we
> need not resolve the issue of whether, or under what circumstances, judicial
> enforcement of private covenants would constitute "state action."
>
> -----SNIP---------

345. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399C6BD2.844860C9@bellatlantic.net>
Source record: 182496
Cross-posted to: alt.comp.hardware.homebuilt,alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.basics

Why do you say "The MOV type will NOT work"?
Do you think gas discharge tubes will *always*
save the computer? If not, what limits do you
think apply? At what voltage do they begin
to conduct? What current carrying capability can
be obtained in the gas discharge tubes you have
in mind? For gas discharge protection, what
kind of ground is needed, if any? Are gas
discharge tubes used for common mode protection,
differential mode protection, or both?
Thanks!

Gordon Nanninga wrote:

> For those times that you are not there to pull the plug gas discharge tubes
> will save the computer. These are available in panel mounts or power strips
> from Belden. {The MOV type will NOT work}
>
> "Nick Roberts" <nick_roberts@my-deja.com> wrote in message
> news:8n4bbp$t2r$1@nnrp1.deja.com...
> > You should always unplug your computer equipment during electrical
> > storms..
> >
> > Nick
> >
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

346. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <u2ucORk4L+EtV0jARqqcAKePDrRv@4ax.com>
Source record: 182497

"jack albert" <jwa@tellabs.com> wrote:

>Trying to purchase a new house without Antenna restrictions or covenants is
>really difficult and
>I'm a little bit confused on the FCC policies concerning the private
>contractual agreements.

I don't have the answer -- this legal stuff is way over my head -- but
in the latest QST, the September issue, on pages 87 and 88, the
"Washington Mailbox" section, there's two pages of info attempting to
clarify what protections a home buyer/owner has or does not have under
PRB-1. This info might also be accessible at the ARRL web site if
you're a member.

Bob
k5qwg

347. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <399C6F40.855C25CD@west.raytheon.com>
Source record: 182498

tom_bruhns@agilent.com wrote:
>
> Let's see here... "current...is retarded by 180 degrees." So...there
> are two terminals of the stub that connect to the driven element and the
> collinear undriven element. Let's say that current goes into one the
> one connected to the driven element. That means that, with the 180
> degree retardation, current also goes into the one connected to the
> collinear element.

Ok.

> But now what you have is not transmission line
> currents, but common mode currents, on the stub.

The total current on the two (upper and lower) stub wires is the sum
of the differential mode and common mode currents.

Assuming the stub is lossless in the differential mode, the
differential mode current will be zero at the terminals and increase
sinusoidially to a maximum at the short. The magnitude of the current
in the short will be the terminal voltage divided by the
characteristic impedance of the differential mode.

The common mode current will be minimum at the shorted end and
increase nearly sinusoidially to maximum at the terminals.

> Do you think that's
> what happens? It's not what Roy's simulation tells us, and it's not
> consistent with what I read in books I trust on the subject: they
> both say that there is a SMALL common mode (antenna) current on the
> stub, and a relatively LARGE excitation of the transmission line
> currents, causing a LARGE voltage drop across the open end of the
> stub.

The ratio of peak common mode to differential mode current is
dependent on the feedpoint impedance of the upper element, and the
differential and common mode characteristic impedances of the stub.
The ratio can be juggled to some extent in the interest of improving
structural integrity, maximizing bandwidth and minimizing losses. All
else being equal, the differential mode currents should be minimized
to reduce the total reactive power. The common mode characteristic
impedance is not as important since it has little effect on common
mode current near resonance. These effects drive to optimization
towards small diameter conductors with large spacing. The optimum
point is reached when the current in the short begins to detract from
the broadside gain.

> Indeed, in that case, the current in one wire of the stub is
> very nearly equal to the current out of the other wire, but not
> exactly equal.

I believe Roy's simulation illustrates exactly what you are
describing.

bart
wb6hqk

348. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399C6FAD.789B3DF@eznec.com>
Source record: 182499

Rich Griffiths wrote:
> . . .
> Don't try to be your own lawyer, and don't accept that realtors know the
> law -- not even property-related law.

Good advice. There's another serious mistake I see people making when it comes to lawyers. A lawyer might be present at the closing, or otherwise involved in the sale, and people sometimes mistakenly assume that his or her legal advice should be followed. That's not how it works. If *you* hire a lawyer, that lawyer's job is to look out for *your* interests and no one else's. Similarly, a lawyer hired by the seller, realtor, lender, or someone else is looking out solely for his or her *client's* interests, not yours. These may be at complete odds with your interests. So if legal advice is needed, hire your own lawyer to watch out for your interests, and don't think for a minute that anyone else's lawyer will do that.

It's always seemed to me a good investment to spend a few hundred dollars for a lawyer before I sign away a couple of hundred thousand on the dotted line. But most people don't seem to see it that way. I also found it to be very worthwhile to spend a day or so at the courthouse looking at the public documents relating to the property in question. Seemed like a small price to pay for added assurance I wasn't going to be making a bad mistake when I agreed to pay all that money.

Roy Lewallen, W7EL

349. Re: TOWERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: "Richard D. Reese" <richardr@sssnet.com>
Message-ID: <399C8623.FFE33ACB@sssnet.com>
Source record: 182500

Last year my guyed tower and antennas were destroyed by a storm. I replaced the tower with an 80 foot freestanding tower from Universal in Michigan. It is 30 inches on a side at the base. You may see photos etc. on my web page at: http://wa8dbw.ifip.com/Tower.htm

73 and good luck
Rich WA8DBW

F-4 JOCK wrote:

> I recently had a wind storm take down my 80 ft. self supporting tower? When
> trying to locate a new 80 ft. tower I am finding nothing. Rohn goes to 64.
> American has crank ups, but no self supporting. Pirod will "make one" for
> you if given all the particulars. I first need a soil engineer to work up a
> soil report, etc. Can't I just find a new 80ft. self supporting and put it
> up? I already have an excellent base. The old tower buckled an about 40 ft.
> It ripped the bolt holes right out. That same wind also took down 13- 70 ft.
> transmission poles of the power lines. Thanks,
>
> FRED

--
Richard D. Reese WA8DBW
http://wa8dbw.ifip.com

350. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399C9210.FF5CB476@oio.net>
Source record: 182501

REDBERD95 wrote:
>
> I should have added that I was looking for a multiband design (and stealth). I
> was thinking about this after seeing an ad for the B&W end fed Inverted Vee
> multiband antenna.
>
> Randy

Randy,
Ask people who have had one of B&W's antennas. You don't wanna
go there!
'Doc

351. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399C9F79.4FFFB224@wb6hqk.ampr.org>
Source record: 182502

Hi Tom,

Donaly wrote:
>
>
> Maybe someone would like to comment on the case of two harmonic
> oscillators
> coupled with a capacitance. If the capacitance is large enough
> (the coupling between the oscillators is great enough) the system
> will have two resonances, one where the currents through
> the oscillators go in the same direction,
> (and the voltages across the capacitor are 180 degrees out of phase)
> and one where the currents are 180 degrees out of phase (and the
> voltages across the capacitor are in phase and equal).

Are you referring to the double peaked response characteristic of a
cascade of two overcoupled resonators? Tuned IF transformers are a
classic example. The effect is also important in the design of Yagi and
other parasitic antennas. Interestingly, the effect is desired, but
seldom achieved in the so called double Bazooka antenna where shorted
1/4 wl stubs are placed in parallel with the feedpoint of a 1/2wl dipole
in an attempt to broadband the antenna.

Good question, but a bit off topic for this thread. I respectfully
suggest you either wait and see if this thread progresses to the point
where optimization of the phase inverter is being discussed or perhaps
begin another thread.

IMHO, the double bazooka would be an excellent topic for discussion in
this forum.

>

bart
wb6hqk

352. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399CAFF3.84491BAA@eznec.com>
Source record: 182503
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Donaly wrote:
>
> You're a radio engineer, Tom. What would you do to make an
> accurate S meter, or even and S meter accurate?
>
> Tom Donaly KA6RUH

Tom must be busy having a life, so I'll take a shot at this question if you don't mind. What you'd need in order to make an accurate S meter (and by this I mean an S meter in which the divisions are an equal and known number of dB apart) is to have the AGC voltage be a truly logarithmic function of the input signal level. This would have to hold over a wide range of signal levels. If I were designing a receiver today to do this, I'd probably begin by looking into some of the log amps available from Analog Devices. Using one in a feedback loop might do the job. Doing it any other way wouldn't be easy. Although a crudely logarithmic function is easy to come up with, one which is truly logarithmic over a wide range, and reasonably temperature stable, isn't. Spectrum analyzers have a logarithmic response over a wide range -- if you think it's simple, take a look at the log amp schematics for a spectrum analyzer.

Consider the fact that receiver manufacturers have been producing receivers for decades which don't have 6 dB per S unit. And their customers frankly don't care. I strongly doubt that an accurate S meter (meaning one with a known and constant number of dB per division) would sell a half dozen more receivers -- in fact, a 6 dB-per-S-unit meter would be regarded as being "dead", and might well inhibit sales. So what incentive do receiver manufacturers have for going to the expense of making a 6 dB per unit S meter? None at all.

Roy Lewallen, W7EL

353. FS: Print your own high-quality QSLs!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: N7GSU <robin@n7gsu.com>
Message-ID: <cH2n5.508$uX.3246@newsfeed.slurp.net>
Source record: 182504

N7GSU QSLs will design custom, high-quality, color QSLs for a flat $30. The designs are sent to you in PDF format and maybe printed as needed using your color printer and readily available card stock.

If you are a member of FISTS, FISTS Northwest, FISTS New England CW Club or QCWA - I have in stock designs that can be customized with your info for only $15.

If you are planning a special event or DXpedition, you owe it to yourself to check into having me design that special, custom QSL for you. If your club doesn't have a logo, needs a club QSL design for it's members, or wants to sponsor an operating award; let me design these for you! Custom QSLs are a flat $30, logo designs and custom award certificates average $30-$50. This includes designs incorporating color photos!

Payment can be accepted by Visa or Mastercard, or by email via PayPal. I also accept checks and MO's. Checkout the website at:

http://www.n7gsu.com and see what I can do. The site is still under construction, but new content is being added daily. If you have an idea you'd like turned into a custom QSL, logo or award certificate... give me a try!

73,

Robin Faulkner, N7GSU
N7GSU QSLs - McMinnville, OR

354. Tank Whip antenna fs - Military specs. like new.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: HamArmy <carcomp@sealande.net>
Message-ID: <399CC3C8.A8C4330B@sealande.net>
Source record: 182505

Tank Whip Antenna for sale on eBay,
Like-new condition, with some parts still in military plastic packaging.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=410311141

355. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399CCEDE.311B4D48@haertig.com>
Source record: 182506

Tom and Bart,

I concede to superior analytical powers!

I was considering the voltage referenced to the elusive third terminal as the (electro)motive force that drives the current into the upper element. But as Bart pointed out to me in an off-NG conversation, the thing about voltage references is that, as long as you are careful in the math, the reference point can be moved around. Since the voltage at the upper end of the lower element can be referenced to the third terminal and since one can reference the voltage at the bottom of the upper element to the same point, it is only an intellectual hop, skip and jump to defining the current in the upper element in terms of the voltage across the gizmo, whatever it may be.

Thanks for the clarification.

Gray

tom_bruhns@agilent.com wrote:
>
> Something that I think is being missed here... in a collinear with
> currents in the upper and lower element like we want them for gain,
> the currents are in phase. When the current is top-to-bottom in one
> element, we want it top-to-bottom in the other element. What you
> actually get in an antenna where you replace the phasing stub (or
> whatever) by a straight wire--in other words, just connect the
> collinear element to the driven element--is current that goes _nearly_
> to zero (but not quite) at that junction, and a short distance away is
> essentially 180 degrees out of phase with the current in the other
> element. So, in effect, having NO "phase-inverting" network at that
> point results in a phase inversion. In fact, if you replace the
> connection with a short gap, an insulator, you STILL get that phase
> inversion from the driven to the collinear element.
>
> How DO you get the phases to be the same? You must provide excitation
> of the mode where the currents are the same phase (direction) in both
> elements, and enough excitation to overcome the excitation that results
> from the mutual impedance between the two elements. Now, consider that
> there is some magnetic coupling and some capacitive coupling from one
> element to the next, and together they result in the mutual impedance.
> WHAT IF you could arrange to put a high voltage between the adjacent
> ends? Yes, that's the voltage that Bart has been talking about, and
> that Gray (sorry Gray) suggested might not matter. If there's a high
> voltage, that high voltage will cause a current in the capacitance that
> exists between the adjacent ends of the elements, and THAT CURRENT

> _must_ flow in the ends of the wires, connecting to that voltage source.
> Draw it out, and you'll see that you then end up with current in the
> same direction in each element, which is just what you want for
> collinear gain. So if you can make the voltage high enough between the
> ends, you will force the mode you want.
>
> How do you get that voltage? One way is with the quarter wave stub
> which couples to the field of the driven antenna in a way that
> transmission line currents are excited on it. One way to NOT do it is
> to put a resonant tank there which does not couple to the field of the
> antenna. One way to NOT do it is to make the quarter wave stub
> collinear/coaxial with one of the antenna elements. But...if you use a
> coil which is physically large and arranged properly (if there is such
> an orientation) to couple to the driven element, that MAY give
> reasonable collinear performance.
>
> Cheers,
> Tom
>
> In article <399C1D11.FEC25464@west.raytheon.com>,
> Bart Rowlett <BHRowlett@west.raytheon.com> wrote:
> >
> >
> > Gray Frierson Haertig wrote:
> > >
> > > All of what you say is true, too, Bart! However, it is not the
> voltage
> > > ACROSS the tank circuit that is responsible for driving the current
> into
> > > the antenna.
> >
> > But it is...
> >
> > Assume the voltage at the top of the lower dipole element is known.
> >
> > Determine the current which must flow between the upper radiator and
> > the phase inverter. This current can be directly computed from the
> > required power flow between the lower and upper elements once the
> > voltage is known with respect to the 'third terminal reference'.
> >
> > Determine the current which must flow between the phase inverter and
> > the upper element. We have already covered the polarity; the optimum
> > magnitude depends on the impedance of the upper radiator but will
> > likely be comparable to the current 'extracted' from the lower
> > element.
> >
> > The required current (complex) into the upper element is now known.
> > The voltage required to force the required current into the upper
> > radiator is simply the current times the endpoint feed impedance with
> > respect to the 'third terminal reference'. Computation of the

> > endpoint feed impedance requires knowledge of the conductor dimensions
> > and the mutual impedance with the lower element along with various
> > environmental factors.
> >
> > The input voltage, output voltage, input current and output current,
> > all complex quantities, are now known. The objective is to design a
> > phase inverter which meets all four constraints, or at least comes
> > close enough.
> >
> > Establishing the correct difference between the input voltage and
> > output voltage of the phase inverter is the primary design objective
> > of the phase inverter.
> >
> > The voltage across the phase inverter is what forces the current in
> > the upper element to the correct magnitude and phase.
> >
> > bart
> > wb6hqk
> >
>
> --
> Tom Bruhns -- K7ITM
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

356. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399CD3EB.2B83ADB0@haertig.com>
Source record: 182507
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Or you can do it all in DSP like my W-J HF-1000.

I haven't verified it's signal strength meter performance, but it is unabashedly calibrated in dBm (with S-units superimposed). Considering W-J's reputation, I suspect it is pretty accurate.

Gray

Roy Lewallen wrote:
>
> Donaly wrote:
> >
> > You're a radio engineer, Tom. What would you do to make an
> > accurate S meter, or even and S meter accurate?
> >
> > Tom Donaly KA6RUH
>
> Tom must be busy having a life, so I'll take a shot at this question if
> you don't mind. What you'd need in order to make an accurate S meter
> (and by this I mean an S meter in which the divisions are an equal and
> known number of dB apart) is to have the AGC voltage be a truly
> logarithmic function of the input signal level. This would have to hold
> over a wide range of signal levels. If I were designing a receiver today
> to do this, I'd probably begin by looking into some of the log amps
> available from Analog Devices. Using one in a feedback loop might do the
> job. Doing it any other way wouldn't be easy. Although a crudely
> logarithmic function is easy to come up with, one which is truly
> logarithmic over a wide range, and reasonably temperature stable, isn't.
> Spectrum analyzers have a logarithmic response over a wide range -- if
> you think it's simple, take a look at the log amp schematics for a
> spectrum analyzer.
>
> Consider the fact that receiver manufacturers have been producing
> receivers for decades which don't have 6 dB per S unit. And their
> customers frankly don't care. I strongly doubt that an accurate S meter
> (meaning one with a known and constant number of dB per division) would
> sell a half dozen more receivers -- in fact, a 6 dB-per-S-unit meter
> would be regarded as being "dead", and might well inhibit sales. So what
> incentive do receiver manufacturers have for going to the expense of
> making a 6 dB per unit S meter? None at all.
>
> Roy Lewallen, W7EL

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

357. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8ng2m7$h32$14@bashir.peak.org>
Source record: 182552

Bill Aycock <baycock@hiwaay.net> wrote:
: It's not just the abstract- all 18 claims are there.The only things
: missing when I went there last night were the figures. I REALLY want to
: see those.

From a quick reading of the claims, it is primarily for a method of
tuning fractal antennas. And many of the claims appear to be open
to challenge, due to prior art.

I will read it more thoroughly when I get a chance, probably this
weekend.

--
Bill Nelson (billn@peak.org)

358. Wanted: Alliance HD 73 rotor control box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: n9yln@aol.com
Message-ID: <20000817031047.02585.00000193@ng-cb1.aol.com>
Source record: 182553

We are looking for a Alliance HD 73 rotor control box. If you have one you would like to sell please email me at: N9YLN@aol.com with the details.
73,
Renee N9YLN

359. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399b95ec.703193@news.akorn.net>
Source record: 182554

On Thu, 17 Aug 2000 00:03:39 -0400, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

>I know about "N" connectors, I have a few, and have installed them on some
>LMR-400 cable. But, I am looking to upgrade a system without having to
>switch everything over to "N" connectors, and the type of UHF connectors I
>am looking for should perform almost as well as the "N" connectors at UHF.
>That is if I can find any.

N connectors, below about 400 MHz, are a waste unless you have a whole
bunch of connectors in the line or are doing precision measurements.

They handle less power than a UHF connector, and are more difficult to
install and depend heavily on shield strength to stay put.

PL-259's aren't as waterproof, so you have to be careful, but they fit
the LMR400 cable without problem.

73 Tom
Morse code forever, communication when other systems let you down.

360. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399b97ee.1217488@news.akorn.net>
Source record: 182555
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Thu, 17 Aug 2000 00:27:44 GMT, ehsjr@bellatlantic.net wrote:
>bar graph on the LCD display). The same ham who
>performed the second test on my Uniden - he also
>uses an HP 608 D - tested his 756 and found it was
>slightly off in the wattmeter. I do not remember whether
>he tested the S meter, but my bet is he did. He is quite
>meticulous about those things. If he did test it, he would
>surely have told me if the S-meter was off.

Amazing. The 756 I had was a mile off. The scale wasn't even close to correct at the low end, although with the preamp off it was about 55 microvolts at S 9.

Once in a while a certain rig of a certain model pops up that apparently is accurate. Too bad the manufacturers can make most of them that way.

I've got 7 radios sitting here in this room, and not one is correct. Most of them don't even have the scale marked "correctly", and because of that can NEVER be calibrated to anything other than 5 dB or less per S unit.

Shame on Icom and Drake for being so stupid they marked the scales wrong, having the same change in meter current below S-9 being 5 dB per S unit instead of 6, when compared to the dB markings on the meters!

I guess thy must use a complex external circuit to make meter sensitivity change at S-9 to a entirely new slope, to make up for the engineering mistake on the scales.

Collins also.

73 Tom

361. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399B9D62.87C53B49@cac.net>
Source record: 182556
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Les Nagy wrote:

> I hope that the following information will prove useful to you. There has
> been quite a bit of misinformation given mainly because of the perception
> that were going to use 200 watts on CB. You did not say that was your
> intent.
>
> Find some 14g (16g is probably fine too) or better wire, around 19 feet
> worth should do. There are ideal types of wire for this purpose such as the
> copper clad type, but even speaker wire works very well and will last a long
> time. As someone else mentioned you will also need a panel mount SO239
> connector. Some UV resistant rope, electrical tape and some silicone round
> up the rest of the materials needed. You will also need another part which
> works with the antenna, some RG58 cable with the proper terminations ie
> PL259.
>
> Cut two pieces of wire to 8'10" long or more. Solder the end on one to the
> bolt hole of the panel flange on the SO239 after making sure it is looped
> though and twisted tightly. Solder the second wire to the centre of the
> SO239. Now silicone each joint to make it water tight. I should mention that
> the silicone is best if is not an acid cure type. Take some rope and tie it
> to the flange wire about one inch from the joint and the same on the centre
> wire. The idea here is to strain relieve the joints such that the rope is
> tight before the joints get pulled on. You should now have an assembly of
> around 17' or a little more. More is better for now.
>
> The next detail is important as it will help reduce currents on the outside
> of the feed coax. The RG58 coax should have 6 - 10 turns in a coil about 6"
> ID near one end, then end you will connect to your antenna. You can also use
> RG8, but it is more expensive and harder to work with for this. Tape up the
> coil with electrical tape and connect it to the SO239 on your antenna and
> then tape up the connector after making sure it is very tight to keep out
> water. How much coax is left after the coil is up to you as this is where
> you will connect your feed coax.
>
> Now make an eye on each end of your antenna. These are not the final eyes so
> just make sure they are good enough to hold things temporarily. Don't worry
> about the length too much but the over length should be close to 17'. I
> don't know how you intend to support this, but keep it away from any metal
> objects by at least 20'. You could hang this in a tree. Anyway attach the
> support rope through the eye on the centre wire and haul it up to the
> operating height. Make sure that you have some method of keeping it straight
> like a bungy cord to something below, or a sand bag etc.... Also make sure

> that the feed coax and choke coil point straight out at right angles or as
> close to possible for as far as you can manage. Connect to your SWR meter
> and radio.
>
> I am assuming that you know how to use an SWR meter. If you do not, then
> read up. Starting at the bottom frequency of interest and working up the
> highest frequency of interest, make note of each SWR reading. If the SWR
> minimum is not within your band, then you will probably need to trim. If the
> SWR keeps falling as you go up in frequency them go outside, shorten both
> ends by an inch and retest. If the SWR starts lower and keeps rising, then
> lengthen each end and retest. Hopefully there is enough extra wires in the
> eyes to do this. Once a test run show the SWR reaching a minimum in the band
> the next step is easier.
>
> Divide the frequency of SWR minimum by the desired centre frequency band of
> interest and multiply the result by the existing length of the antenna to
> find the correct length needed. Go out and make the "final" adjustment to
> match this length. Check your SWR one last time of course to make sure.
>
> And there you have it. A simple dipole. Maybe not the best dipole, maybe not
> the most efficient antenna, but you made it. There are many other aspects of
> antenna installation that I will not go into here like safety and grounding,
> but the library should be of great use here and I recommend that you do some
> real research into these other aspects before installing any antenna. I
> don't want to be responsible for any more accidents. None of the above is
> new stuff, just a rehash of many articles and instructions from the past.
> Have fun and don't worry about perfection too much.
>
> ----
> Les Nagy

Les:

Thanks for this. You pointed out a couple of things I hadn't thought of, whch will probably make a big difference where the installation is concerned.

I'm still churning it about in my mind. It will get built sometime in the next couple of months, and we'll see how it goes.

73's

-SSB

362. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26442-399BDC1F-8@storefull-118.iap.bryant.webtv.net>
Source record: 182557

Gordon Nanninga wrote:
"(The MOV type will NOT work)"

Why would a fast-acting voltage regulator, much like hefty back-to-back zeners, but in fact a voltage variable resistor (the more voltage, the lower the resistance), not work?

Best regards, Richard Harrison, KB5WZI

363. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ngo3n$mk2$1@nnrp1.deja.com>
Source record: 182558

In article <20000816221224.20301.00000219@ng-fh1.aol.com>,
redberd95@aol.comnospam (REDBERD95) wrote:
> I would like info on making an end feed dipole or similier antenna.
If
> possible mail to redberd95@aol.com
>
> Randy KA4NMA
>
You can end feed a 'dipole' with ladder line through a balun and a
tuner.... Usually hung horizontal. This will give you a multiband
antenna from the dipole length and up in freq.
Unfortunately there is very little written about doing this. I have
only tried it once, portable, where I could not use a center fed
antenna. It did tune and seemed to work OK. I do not have a lot of
experience with it.
Worth trying ... it is simple, and a tuner / balun are ez to homebrew
and/or find used (check e-Bay, they always have caps, roller inductors
and commercial tuners for sale)
G'luck
73
Den Spiess W2DEN _._

Sent via Deja.com http://www.deja.com/
Before you buy.

364. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <spno5j5gr5j178@corp.supernews.com>
Source record: 182559

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:399b95ec.703193@news.akorn.net...
>
> N connectors, below about 400 MHz, are a waste unless you have a whole
> bunch of connectors in the line or are doing precision measurements.

As I have found out that all "depends" on two factors. The first is the type of dielectric material used, and second the length of the connector. I did a simple purely mathematical study of a 1 inch long SO-239 barrel connector, with a PL-259 plug on each end, for an overall length of 1.25 inches, as a test case. I have always heard the rule of thumb not to use UHF connectors above the 2 meter band, and I wanted to find out why they are so "bad".

The data below was calculated based on the formulas I looked up to calculate the Z of a coaxial conductor system, and the loss less transmission line equation. All the calculations assume a pure load Z of 50 ohms connected to one end of the barrel connector. The barrel connector, and plugs, are treated as a transmission line with the length corrected for the frequency used.

For a Teflon dielectric with a dielectric constant of 2.1 I get:

Zconnector=34.5 ohms

440 MHz; SWR=1.365
146 MHz; SWR=1.112
52 MHz; SWR=1.039
29 MHz; SWR=1.021

For the cheap Penolic dielectric with a dielectric constant of 4 I get:

Zconnector=25 ohms

440 MHz; SWR=2.241
146 MHz; SWR=1.335
52 MHz; SWR=1.109
29 MHz; SWR=1.06

And for the record with an Air dielectric constant of 4 I get:

Zconnector=50 ohms (Hum, very interesting!)

This would strongly suggest a UHF connector using mostly air should work almost as well as a "constant Z" connector design. This would explain the rib structure used to hold the center conductor in place on the high quality SO-239 antenna mounts I have looked at, and the connectors on the back of some V/UHF SWR-Watt meters too.

As you can see either dielectric type will give acceptable results on the 2 meter band, and below, with a perfect 50 ohm load. However on the 70 cm band, unless you have a load close to 50 ohms, even the Teflon dielectric may not work well, while the Penolic dielectric material is out of the question. Both types of dielectric material appear to be OK for use on the 6 meter band and below. Remember that the above results are calculated for a "Z bump" of 1.25 inches, a much longer connector, such as the long bulkhead ones I have seen at Ham swaps, can cause SWR problems even at HF!

So like I said it all "depends", and using "N" connectors, or other "constant Z" connectors, may not be such a dumb thing do, even below 400 MHz.

IMHO I guess it pays to go back and reexamine rules-of-thumb. Its amazing what a little bit of investigation teaches one about how these rules-of-thumb come about, and how to apply them in an intelligent manner. Ham Radio, its a learning process for me as much as getting on the air and yacking with other operators.

--
Leland C. Scott
KC8LDO

365. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26443-399BE1B2-3@storefull-118.iap.bryant.webtv.net>
Source record: 182560

Tom, W8JI wrote:
"A stub can have a third terminal from its somewhat low common mode
impedance---."

I think 1/4-wave short-circuit stubs used to couple colinear elements in
an array are working as 1/2-wavelengths of wire which don`t
radiate to mess-up the pattern. Current traveling through 1/2-wavelength
of wire is retarded by 180 degrees.

Best regards, Richard Harrison, KB5WZI

366. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: kleing@NOSPAMqualcomm.com
Message-ID: <399de0ef.120584811@news>
Source record: 182561

On Wed, 16 Aug 2000 15:13:27 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Bill Aycock wrote:
>
>> It's not just the abstract- all 18 claims are there.The only things
>> missing when I went there last night were the figures. I REALLY want to
>> see those.

The figures are there too. If you are at the US Patent office
website, once you get to the patent you are looking for, there is a
push button that says "images". Click on this and you'll get to look
at the image of each page including the figures. You'll need software
for TIFF file types.

Klein, WT6G

367. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Les Nagy <lnagy@mountaincable.net>
Message-ID: <RqSm5.70$XN5.15142047@news1.mountaincable.net>
Source record: 182562
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

The purpose of the SO239 connector is that if the antenna breaks, or fails for some reason, it is easy to disconnect it from the choke coil and reattach another. If you don't mind cutting and soldering coax, then you can save some money and attach the wires directly to the coax. Just remember to strain relieve everything. If you want pictures and ideas on any of this, go to the library and look in the ARRL handbooks, or look at AC6V's page on antennas to find all kinds of info.

--

Les Nagy

"sideband" <sideband@cac.net> wrote in message
news:399B9D62.87C53B49@cac.net...
> Les Nagy wrote:
>
> > I hope that the following information will prove useful to you. There
has
> > been quite a bit of misinformation given mainly because of the
perception
> > that were going to use 200 watts on CB. You did not say that was your
> > intent.
> >
> > Find some 14g (16g is probably fine too) or better wire, around 19 feet
> > worth should do. There are ideal types of wire for this purpose such as
the
> > copper clad type, but even speaker wire works very well and will last a
long
> > time. As someone else mentioned you will also need a panel mount SO239
> > connector. Some UV resistant rope, electrical tape and some silicone
round
> > up the rest of the materials needed. You will also need another part
which
> > works with the antenna, some RG58 cable with the proper terminations ie
> > PL259.
> >
> > Cut two pieces of wire to 8'10" long or more. Solder the end on one to
the
> > bolt hole of the panel flange on the SO239 after making sure it is
looped
> > though and twisted tightly. Solder the second wire to the centre of the
> > SO239. Now silicone each joint to make it water tight. I should mention
that
> > the silicone is best if is not an acid cure type. Take some rope and tie

it
> > to the flange wire about one inch from the joint and the same on the
centre
> > wire. The idea here is to strain relieve the joints such that the rope
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> > tight before the joints get pulled on. You should now have an assembly
of
> > around 17' or a little more. More is better for now.
> >
> > The next detail is important as it will help reduce currents on the
outside
> > of the feed coax. The RG58 coax should have 6 - 10 turns in a coil about
6"
> > ID near one end, then end you will connect to your antenna. You can also
use
> > RG8, but it is more expensive and harder to work with for this. Tape up
the
> > coil with electrical tape and connect it to the SO239 on your antenna
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> > then tape up the connector after making sure it is very tight to keep
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> > water. How much coax is left after the coil is up to you as this is
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> > you will connect your feed coax.
> >
> > Now make an eye on each end of your antenna. These are not the final
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> > just make sure they are good enough to hold things temporarily. Don't
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> > about the length too much but the over length should be close to 17'. I
> > don't know how you intend to support this, but keep it away from any
metal
> > objects by at least 20'. You could hang this in a tree. Anyway attach
the
> > support rope through the eye on the centre wire and haul it up to the
> > operating height. Make sure that you have some method of keeping it
straight
> > like a bungy cord to something below, or a sand bag etc.... Also make
sure
> > that the feed coax and choke coil point straight out at right angles or
as
> > close to possible for as far as you can manage. Connect to your SWR
meter
> > and radio.
> >
> > I am assuming that you know how to use an SWR meter. If you do not, then
> > read up. Starting at the bottom frequency of interest and working up the
> > highest frequency of interest, make note of each SWR reading. If the SWR
> > minimum is not within your band, then you will probably need to trim. If
the

> > SWR keeps falling as you go up in frequency them go outside, shorten
both
> > ends by an inch and retest. If the SWR starts lower and keeps rising,
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> > lengthen each end and retest. Hopefully there is enough extra wires in
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> > eyes to do this. Once a test run show the SWR reaching a minimum in the
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> > the next step is easier.
> >
> > Divide the frequency of SWR minimum by the desired centre frequency band
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> > interest and multiply the result by the existing length of the antenna
to
> > find the correct length needed. Go out and make the "final" adjustment
to
> > match this length. Check your SWR one last time of course to make sure.
> >
> > And there you have it. A simple dipole. Maybe not the best dipole, maybe
not
> > the most efficient antenna, but you made it. There are many other
aspects of
> > antenna installation that I will not go into here like safety and
grounding,
> > but the library should be of great use here and I recommend that you do
some
> > real research into these other aspects before installing any antenna. I
> > don't want to be responsible for any more accidents. None of the above
is
> > new stuff, just a rehash of many articles and instructions from the
past.
> > Have fun and don't worry about perfection too much.
> >
> > ----
> > Les Nagy
>
> Les:
>
> Thanks for this. You pointed out a couple of things I hadn't thought of,
whch
> will probably make a big difference where the installation is concerned.
>
> I'm still churning it about in my mind. It will get built sometime in the
next
> couple of months, and we'll see how it goes.
>
> 73's
>
> -SSB
>

>

368. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399bee5d.23347278@news.akorn.net>
Source record: 182563

On Thu, 17 Aug 2000 08:52:15 -0400, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

Good post. It's especially important to point virtually out all of the
"bump" occurs in the female part of the UHF connector. The male by
itself is fine when properly installed.

Females can be trouble at UHF, especially if you have a lot of them in
line.

>For the cheap Penolic dielectric with a dielectric constant of 4 I get:
>
>Zconnector=25 ohms
>
>440 MHz; SWR=2.241
>146 MHz; SWR=1.335
>52 MHz; SWR=1.109
>29 MHz; SWR=1.06

I've never seen a Penolic dielectric barrel connector, but of course
there are a large variety of connectors manufactured.

Barrel connector could indeed be a problem at UHF, if long enogh and
if the construction is poor enough. The could be a problem at VHF, if
the same poor quality applies and you use enough of them in the line.

>And for the record with an Air dielectric constant of 4 I get:
>
>Zconnector=50 ohms (Hum, very interesting!)
>
>This would strongly suggest a UHF connector using mostly air should work
>almost as well as a "constant Z" connector design. This would explain the
>rib structure used to hold the center conductor in place on the high quality
>SO-239 antenna mounts I have looked at, and the connectors on the back of
>some V/UHF SWR-Watt meters too.

A common trick, if you have a critical application, is to drill out
most of the dielectric in a standard connector. Pretty much needless
at lower frequencies, but in critical applications it can make a
difference at upper VHF and higher.

>As you can see either dielectric type will give acceptable results on the 2
>meter band, and below, with a perfect 50 ohm load. However on the 70 cm
>band, unless you have a load close to 50 ohms, even the Teflon dielectric
>may not work well, while the Penolic dielectric material is out of the
>question. Both types of dielectric material appear to be OK for use on the 6
>meter band and below. Remember that the above results are calculated for a

>"Z bump" of 1.25 inches, a much longer connector, such as the long bulkhead
>ones I have seen at Ham swaps, can cause SWR problems even at HF!

I've never seen that, and I use plenty of bulkhead connectors. It
would take almost a foot long female connector to cause a problem at
ten meters, or a bunch of shorter bumps placed at stratigic spots in
the line. Even so, the effect on loss would be low.

By far the biggest worry is some connectors, like those from Radio
Shack, overheat at high power levels (over 1000 watts) during extended
transmissions.

>So like I said it all "depends", and using "N" connectors, or other
>"constant Z" connectors, may not be such a dumb thing do, even below 400
>MHz.

Anyone using N connectors in QRO applications is asking for trouble.
Especially if SWR might ever get high.

People are often too concerned about SWR, and not enough about
comnponent reliability. An SWR of 1.5:1, especially if it is induced
near the rig end of the feedline, is meaningless in most applications.
The exception would be if the rig shuts down from the SWR, or if the
impedance goes "high" and unloads a fixed-tuned PA.

I think the perception SWR must be perfect comes from misuse of the
term "mismatch loss", or a lack of understanding of what SWR means and
how it affects the system.

73 Tom

369. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399bf443.24857409@news.akorn.net>
Source record: 182564

On Thu, 17 Aug 2000 07:59:30 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>I think 1/4-wave short-circuit stubs used to couple colinear elements in >an array are working as 1/2-wavelengths of wire which don`t >radiate to mess-up the pattern. Current traveling through 1/2-wavelength >of wire is retarded by 180 degrees.

I can have pass current through a 1/2 wl of wire that delays phase 180 degrees, less than 180 degrees, or more than 180 degrees.

So you have to be careful how that "wire" is arranged.

As Roy pointed out, these small balanced stubs often radiate. Linear loading systemn do that.

Depending on which direction you fold the linear loading, you can move the load anywhere from out on the element to in on the element from the actual attachment point.

370. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399bf55b.25137949@news.akorn.net>
Source record: 182565

On Thu, 17 Aug 2000 13:08:20 GMT, Den <dennis.spiess@reckitt.com>
wrote:

>You can end feed a 'dipole' with ladder line through a balun and a
>tuner.... Usually hung horizontal. This will give you a multiband
>antenna from the dipole length and up in freq.

Hi Den,

That only works if the balun is imperfect, and in every case where the
antenna radiates the feedline will also radiate.

Any end-fed antenna needs some sort of "counterpoise" to push against,
if you don't give it one it will find one on it's own, and the results
can be undesirable.

73 Tom

371. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399BFD18.80377D3A@wb6hqk.ampr.org>
Source record: 182566

Gray Frierson Haertig wrote:
>
> Hey Richard,
>
> All you say is true! However, the voltage ACROSS the two terminal
> network in the tank implementation of the collinear antenna is
> immaterial as it is not responsible for driving
> any current into the elements.

OhOh, gotta be careful here. The voltage is what actually causes the current to flow into the finite impedance of the upper radiator. The problem could be stated:

1) What must the voltage (complex) be at the upper terminal of the phase inverter in order to induce the specified current (complex) flow into the upper element?

2) How can I design a phase inverter which supplies the necessary voltage _and_ current into the load (upper element)?

bart
wb6hqk

372. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399C008A.8234D54@wb6hqk.ampr.org>
Source record: 182567

Tom W8JI wrote:
>
>
> Thanks Roy, for modelling the antenna and confirming it works as it
> worked, hi hi.

Ditto. Thanks Roy.

> I could make my work with a tuned circuit, but only when I dangled a
> 1/4 wl wire from a center tap on the tuned circuit.

EZNEC could easily model the LC circuit embodiment, with and without
counterpoise.

>
> Nice point about the stub radiating! They sure do even when we hope
> they don't. The J-pole is an example of that.

In the Jpole, the stub is colinear with the radiator. The current on
the stub is of the opposite polarity to the current on the radiator and
will slightly reduce the broadside gain compared to a simple dipole.
Bending the stub so it is perpendicular to the radiator causes the
radiation induced by the stub to appear at high angles, which in the
usual VHF application is considered wasted power. The power may seem
wasted but at least isn't used to destructively interfere with the
radiation pattern in the desired direction. An even better approach is
to go ahead and balance the system with another radiator below the
(horizontal) stub......

> We sure have to be careful applying "circuit models" to antennas.

Indeed. But carefully done, the exercise can result in considerable
insight into how antennas and transmission lines actually work.

bart
wb6hqk

373. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:00:00 UTC
From: Denis Sharon <denis.sharon@worldnet.att.net>
Message-ID: <9pTm5.61384$RG6.3202415@bgtnsc05-news.ops.worldnet.att.net>
Source record: 182568

> Females can be trouble at UHF, especially if you have a lot of them in
> line.

Oh how true... and not just at UHF!

Denis Sharon W1AOK
Ridgefield, CT

374. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:15:47 UTC
From: 2w8ji@contesting.com
Message-ID: <399b2cb3.54452719@news.akorn.net>
Source record: 182536

On Wed, 16 Aug 2000 16:28:00 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>When you do, be sure and be careful how you determine that it "works".
>There's substantial current in the upper element even if there's no
>connection between elements, but the pattern and gain are quite
>different than they are when the antenna is working properly.
>
>Roy Lewallen, W7EL

Thanks Roy, for modelling the antenna and confirming it works as it
worked, hi hi.

I could make my work with a tuned circuit, but only when I dangled a
1/4 wl wire from a center tap on the tuned circuit.

It also worked with a stub.

I suspect it wouldn't have worked at all if I folded the stub up.

Nice point about the stub radiating! They sure do even when we hope
they don't. The J-pole is an example of that.

We sure have to be careful applying "circuit models" to antennas.

73 Tom

375. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:27:44 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399B31BB.D2C8EF4F@bellatlantic.net>
Source record: 182537
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy,

Well, I've measured my S meter's accuracy, and it is
exaqctly as Reg described. This was on a cheap
Uniden - the "President" model which also goes
by model number 2510. It is a 10 meter all mode
radio, used as the IF for a 6 meter transverter.
I measured it because the transverter seemed to
hear very poorly. Any way, it was exactly on,
yet the setup was still deaf. I got to questioning the
accuracy of my signal generator - an HP 608 D.
So I brought the setup to a friends house, and he
measured it with his test equipment - it was spot on.
But there was a major difference - when we hooked
the transverter to his antenna, all of a sudden I could
hear 6 meter signals. 6 antennas later, I'm still
fairly deaf at my qth - but the rig works.

My guess is that most new radios are fairly accurate -
when the s-meter shows S-9 you've got close to
100 microvolts. I expect accuracy drops off the farther
away from S-9 you get. My Uniden was pretty good
down to S 3 or S 4 - I don't remember which.
When I get a few projects out of the way, I'll drag
my 746 over to the generator and see how accurate
it's " s-meter " is. (Not a meter at all - a horizontal
bar graph on the LCD display). The same ham who
performed the second test on my Uniden - he also
uses an HP 608 D - tested his 756 and found it was
slightly off in the wattmeter. I do not remember whether
he tested the S meter, but my bet is he did. He is quite
meticulous about those things. If he did test it, he would
surely have told me if the S-meter was off. I'll have to ask
him. Or, if you work him, you can ask him yourself.
His call is WA2WEJ

Roy Lewallen wrote:

> Ah, Reg, you never disappoint me. Theory is always so much tidier when
> not sullied by those annoying measurements. As long as we never actually
> measure our S-meters, we can remain steadfast in our certainty of their
> precision. Exept for American S-meters, of course.
>
> Roy Lewallen, W7EL

>
> Reg Edwards wrote:
> >
> > Dear Roy,
> >
> > I have not the slightest wish to be thought offensive, but
> > the calibration of your particular ancient S-meter, of my
> > particular modern S-meter, or of anyone else's particular
> > S-meter, has nothing to do with acceptance/adoption of some
> > form of standard when aligning/checking amateur radio
> > receivers at the end of a production line.
> >
> > It is VITAL the test engineer (or pretty girl?) be told the
> > signal generator settings when twiddling the preset gain
> > controls. Otherwise nothing would ever get out of the
> > factory gates.
> >
> > For many years the the defacto standard adopted by
> > international manufacturers (certainly the Japanese but
> > probably preceded by US citizens) has been :-
> >
> > (1) With no signal input twiddle something to set up S-meter
> > zero.
> >
> > (2) With 100 microvolts open circuit from a 50-ohm signal
> > generator at 7 MHz, twiddle the second preset gain control
> > for a reading of S9 on the S-meter.
> >
> > (3) Set the signal generator to 10 millivolts and twiddle
> > the third preset for a meter reading of S9+40 dB.
> >
> > (4) Go back and forth between (1), (2) and (3) till the
> > interaction disappears.
> >
> > From the internationally adopted DEFACTO S-meter scale
> > graduations this corresponds to 1 S-unit = 6dB, which fits
> > very nicely into the age before S-meters were fashionable,
> > and when an S9 report simply meant "Very Loud" and S-zero
> > meant "Have you gone QRT ?".
> >
> > S9, at 1/2 full scale meter deflection, corresponds
> > logarithmically (dB-wise) to half way between the
> > first-mixer, 50-ohm, 3 kHz bandwidth noise level and the
> > receiver signal input (at 50-ohm)level at which the intermod
> > products begin to be excessive and difficult to control.
> >
> > So there are sound engineering reasons, not just historical
> > and traditional, for the defacto standard of 50 microvolts
> > into 50 ohms and 6dB per S-unit. And a 2-to-1 voltage ratio
> > is very convenient for mental arithmetic.

> >
> > Forgive me for the repetition - how your or my particular
> > S-meter behaves has nothing whatsoever to do with it. And in
> > the whole of my 60 years of experience of designing,
> > manufacturing and using communications measuring equipment I
> > have never been surprised at any measurement results made by
> > myself. And on the downside - not by anybody else. I
> > invariably expect the worst. Delusions of accuracy is the
> > most common ailment in this world of engineering.
> > --
> > --
> > Regards from Reg, G4FGQ
> > For free radio design software go to:
> > http://www.btinternet.com/~g4fgq.regp
> > --

376. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 00:34:12 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399B333F.1D48FF77@bellatlantic.net>
Source record: 182538
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

ehsjr@bellatlantic.net wrote:

>
> My guess is that most new radios are fairly accurate -
> when the s-meter shows S-9 you've got close to
> 100 microvolts.

Meant to say close to 50 microvolts

377. Re: EZNEC Q?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 01:07:47 UTC
From: atkes@imap1.asu.edu
Message-ID: <8nfdt3$ph4$1@news.asu.edu>
Source record: 182539

Roy Lewallen (w7el@eznec.com) wrote:
snip
: Yuri Blanarovich wrote:
: EZNEC uses 299792500 m/sec as the speed of light. This is correct to
: seven decimal digits, according to the _Handbook of Chemistry and
: Physics_. 300 million is just fine, but the more precise value is no
: problem for the program.
snip

I find it amusing, not that it makes any difference for antennas, that since the meter is no longer defined by the length of a metal rod in Paris, it is now a derived unit with c in meters per second the conversion factor from light-seconds to meters,
1 light second = 299792458 meter
or
c = 299792458 meter/second
exactly. This is similar to other standard conversion factors like
1 inch = 2.54 centimeters
exactly.

It also means that the SI conversion factors epsilon_0 and mu_0 are also given exactly: mu_0 = 4 pi 10^(-7), and epsilon_0 = 1/(mu_0 c^2).

Maybe if the French revolution had occured in 1989 rather than 1789, we would have a metric system with the length unit equal to a light second and c would have the value of 1 in those units.

73 Kevin w9cf

378. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 01:26:43 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <nbHm5.29607$NH2.254175@typhoon.ne.mediaone.net>
Source record: 182540

Talking to yourself is the second sign of insanity...
Do you know what your first sign was?
(Remember, tense is important)

379. Re: TGM hybrid quad!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 01:35:27 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <399b40a4$0$759$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182541

Hello Al,no change here,not sure why my direct emails to you are garbled??
see if you can read this,if so,check your mail program,
rgds Dennis.

Al <noone@hotmail.com> wrote in message
news:8JJl5.13888$H14.31374@newsfeed.slurp.net...
> Hello, anyone out there in cyberspace ever heard or used one these, I got
> one for a good price. It's a small 2 el 6-20m beam that can be used with
a
> tv rotator. It uses spokes to tune it, yes I know...but it really does
have
> them...Seems like a neat idea for people who can't put up a tower and
large
> expensive beam...It's made in Canada...so maybe it'll take cold weather
> good...no website that I could find....73...Al
>
>

380. Re: "Flingshot" Antenna Tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 01:45:29 UTC
From: k9sqg@aol.com
Message-ID: <20000816214529.15386.00000225@ng-bd1.aol.com>
Source record: 182542

Unless one is putting up a lot of antennas, a spool of Game Tracker is all you need in lieu of the spinning reel.

381. how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 02:12:24 UTC
From: redberd95@aol.comnospam
Message-ID: <20000816221224.20301.00000219@ng-fh1.aol.com>
Source record: 182543

I would like info on making an end feed dipole or similier antenna. If possible mail to redberd95@aol.com

Randy KA4NMA

382. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 02:24:47 UTC
From: Pete <Pete@xyz.com>
Message-ID: <P1Im5.4203$ZI2.124556@news1.rdc1.il.home.com>
Source record: 182544

"Pete" <Pete@xyz.com> wrote in message
news:zeDm5.3673$ZI2.89462@news1.rdc1.il.home.com...
> Slick Willy "The dirty draft dodger" takes credit for the good economy. He
> thinks the democrats are responsible for it. They controlled Congress for
40
> years and the economy floundered, then the Republicans took control of
> congress and everything skyrocketed. The democrats just won't give what
> started under Reagan, continued building during Bush's term, and really
took
> off when the Republican's took control of congress any credit, - and
Slick
> Willy takes credit for it. The democrats say the budget deficit quadrupled
> under Reagan and I say it costs a lot of money to win the Cold war. It
> didn't come cheap. It was well worth the money it costs.
> We Americans have no choice but to vote for a Republican President. No
> democrat can put up a valid argument against voting for Bush!
>
> "David J. Windisch" <davidw@copper.net> wrote in message
> news:6rCm5.2539$M%6.10803@newsfeed.slurp.net...
> > WB6SHI wrote:
> > "Vote Republican, save your butt."
> >
> > If you have to vote Republican to save your butt, you are in the same
> > position as recommended to those caught in a thunderstorm. You have your
> > ass pointed at the sky and your head between your knees.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
> >
> > A great position for the dumbocrap mule to come along and kick your
butt,
> > I'd say.
> >
> > 73, Dave, K3BHJ
> >
> >
> >
>
>

383. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 02:33:08 UTC
From: k6mhe@arrl.net
Message-ID: <399b4e6b.1491606@news.mcn.org>
Source record: 182548

On Wed, 16 Aug 2000 17:00:32 GMT, WB3KUM/9
<breedend@NO.excite.SPAM.com> wrote:

>No, I have not. But if you are worried about loss or an impeadance hump, just
>use "N" connectors. They are not that expensive and may be cheaper the this
>"custom" type of UHF connector.

And after changing over to the "N"s I would bet the farm that no one
would know the difference if you didn't tell them.....

On the other hand you can have that warm fuzzy feeling that your
"lumps" are smaller.

73
Danny, K6MHE

384. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 04:03:39 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8nfrp4$si6@nnrp1.farm.idt.net>
Source record: 182546

"WB3KUM/9" <breedend@NO.excite.SPAM.com> wrote in message
news:399AC912.565DEB79@NO.excite.SPAM.com...
> No, I have not. But if you are worried about loss or an impeadance hump,
just
> use "N" connectors. They are not that expensive and may be cheaper the
this
> "custom" type of UHF connector.

I know about "N" connectors, I have a few, and have installed them on some LMR-400 cable. But, I am looking to upgrade a system without having to switch everything over to "N" connectors, and the type of UHF connectors I am looking for should perform almost as well as the "N" connectors at UHF. That is if I can find any.

As far as the "N" connectors being cheap the best price I have found is around $3 to $4 USD each for the male clamp type, at local Ham swaps. I don't like the cheap solder "N" type connectors, had to get the metal too hot to solder which started to melt the jacket on the ultrafelx LMR cable I have.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

385. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 04:19:02 UTC
From: reality <info@NOSPAM.com>
Message-ID: <399B67B5.D69F8FD2@NOSPAM.com>
Source record: 182545
Cross-posted to: alt.engineering.electrical,alt.comp.hardware.homebuilt,rec.radio.amateur.antenna,sci.electronics.basics

Read:
http://www.contesting.com/_towertalk/199909/0143.html

Klein Gilhousen wrote:

> I'm a little confused about something. I thought I had heard stories
> about grounding arrangements for towers that could result in the
> concrete in the footing "exploding" when the tower is hit by
> lightning. What would cause this if concrete and rebar is a good
> ground? What should you do (and not do) in construction of the
> footing to avoid this kind of catastropic distruction of the footing?
> Or am I just totally confused?
>
> Klein, WT6G
>
> On Sat, 12 Aug 2000 13:49:45 -0400, Gary Coffman <ke4zv@bellsouth.net>
> wrote:
>
> >On Fri, 11 Aug 2000 17:40:29 -0700, Rich Grise <richgrise@vel.net> wrote:
> >>tom w wrote:
> >>...
> >>> If we were serious about
> >>> lightning, then all homes might have Ufer grounding - which
> >>> already exists in all homes but is not connected - because we
> >>> still build homes as if the transistor did not exist.
> >>
> >>OK, I give up. What's "Ufer grounding?"
> >
> >During WWII, the Army had problems with ammo bunkers
> >blowing up due to lightning strikes. They called in Dr. Ufer
> >to find a solution. He found that they were using inadequate
> >grounds based on driven ground rods to terminate their
> >lightning rods. He figured that a very good lightning ground
> >would be rebar in concrete, with all the rebar bonded together
> >and brought out to a grounding terminal. When this technique
> >was employed, lightning triggered ammo bunker explosions
> >stopped happening.
> >
> >This technique, named after him, was adopted as a preferred
> >grounding technique by the National Electrical Code. Code
> >requires a minimum Ufer ground to consist of a minimum of 20
> >lineal feet of half inch rebar in concrete at least 2 inches thick.
> >(More is better, of course.)
> >

> >In typical slab construction, there may be several hundred
> >feet of rebar, and 6 or more inches of concrete. This forms
> >a highly effective connection to Earth two different ways.
> >First, it forms a large capacitor plate, with the other plate
> >being the Earth. This capacitor will have a small reactance
> >and couples RF to ground very effectively (lightning is RF).
> >
> >Second, the concrete, which is a better conductor than
> >typical soil because of the ionic nature of the cement,
> >forms a large sheet conductance bonded face to face
> >to the large sheet conductance which is the Earth. In
> >effect we have billions of resistors in parallel, which
> >results in a very low total resistance to currents flowing
> >to or from Earth.
> >
> >That's what makes a Ufer ground a preferred way to
> >establish a connection to Earth.
> >
> >Gary
> >Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> >534 Shannon Way | We break it |
> >Lawrenceville, GA | Guaranteed |

386. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 05:10:58 UTC
From: Gordon Nanninga <G.G.Nanninga@worldnet.att.net>
Message-ID: <CtKm5.11911$4T.699204@bgtnsc07-news.ops.worldnet.att.net>
Source record: 182547
Cross-posted to: alt.comp.hardware.homebuilt,alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.basics

For those times that you are not there to pull the plug gas discharge tubes
will save the computer. These are available in panel mounts or power strips
from Belden. {The MOV type will NOT work}

"Nick Roberts" <nick_roberts@my-deja.com> wrote in message
news:8n4bbp$t2r$1@nnrp1.deja.com...
> You should always unplug your computer equipment during electrical
> storms..
>
> Nick
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

387. Re: patent

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 05:39:30 UTC
From: dennis@wawa.juniper.net
Message-ID: <8nftqi$26d7$1@heap.juniper.net>
Source record: 182549

Jim Kelley <jwkelley@uci.edu> wrote:
>
>Roger, Bill. I read further. Looks like the claims cover general
>arrangements of multiple fractal shaped antenna elements. The abstract
>and title don't seem to correlate very well to the claims. Somebody
>already mentioned that. Haven't seen the specification yet.

My reading of the claims (a literal reading, like a lawyer, since I
don't know enough about the topic to understand the implications)
is that it patents the placing of a conductive element of some sort,
either grounded or parasitic, close to a fractal antenna for the sole
purpose of changing the resonant frequency and/or bandwidth of the
original antenna. It seems to me this isn't very general. It doesn't
prevent you from just designing the original fractal antenna for the
desired resonant frequency and bandwidth, nor does it seem to prevent
you from adding elements to the antenna to change other parameters,
like gain or directivity (though I guess it might take a trip to court
to show that you added the elements solely to increase gain or directivity
and not to change the resonant frequency or bandwidth).

This seems to be quite a narrow patent. The description in fact
goes through a lot of material which doesn't seem to be covered in the
claims. In the field that I work in this is generally considered
bad practice, since it reveals stuff that you aren't patenting, but
it may be that other patents that cover some of this are forthcoming
or, perhaps, that he wanted to make sure no one else could patent
the material if he couldn't.

This is a continuation of two predecessor patents, now abandoned.
This sometimes, but not always, indicates that the patent examiner
rejected the meaningful claims in the earlier applications. If so
this can result in a bunch of narrow patents being split off so you can
avoid delaying them while you argue about (or give up on) the
contentious issues.

I don't think this patent constrains the field for fractal antenna
builders very much, though people may need to design their own to
ensure that elements for the purpose of changing resonant frequency
or bandwidth aren't slipped in. Maybe the good stuff is yet to
come.

Dennis Ferguson

388. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 06:11:49 UTC
From: Les Nagy <lnagy@mountaincable.net>
Message-ID: <inLm5.68$Ax5.14437547@news1.mountaincable.net>
Source record: 182550
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

I hope that the following information will prove useful to you. There has been quite a bit of misinformation given mainly because of the perception that were going to use 200 watts on CB. You did not say that was your intent.

Find some 14g (16g is probably fine too) or better wire, around 19 feet worth should do. There are ideal types of wire for this purpose such as the copper clad type, but even speaker wire works very well and will last a long time. As someone else mentioned you will also need a panel mount SO239 connector. Some UV resistant rope, electrical tape and some silicone round up the rest of the materials needed. You will also need another part which works with the antenna, some RG58 cable with the proper terminations ie PL259.

Cut two pieces of wire to 8'10" long or more. Solder the end on one to the bolt hole of the panel flange on the SO239 after making sure it is looped though and twisted tightly. Solder the second wire to the centre of the SO239. Now silicone each joint to make it water tight. I should mention that the silicone is best if is not an acid cure type. Take some rope and tie it to the flange wire about one inch from the joint and the same on the centre wire. The idea here is to strain relieve the joints such that the rope is tight before the joints get pulled on. You should now have an assembly of around 17' or a little more. More is better for now.

The next detail is important as it will help reduce currents on the outside of the feed coax. The RG58 coax should have 6 - 10 turns in a coil about 6" ID near one end, then end you will connect to your antenna. You can also use RG8, but it is more expensive and harder to work with for this. Tape up the coil with electrical tape and connect it to the SO239 on your antenna and then tape up the connector after making sure it is very tight to keep out water. How much coax is left after the coil is up to you as this is where you will connect your feed coax.

Now make an eye on each end of your antenna. These are not the final eyes so just make sure they are good enough to hold things temporarily. Don't worry about the length too much but the over length should be close to 17'. I don't know how you intend to support this, but keep it away from any metal objects by at least 20'. You could hang this in a tree. Anyway attach the support rope through the eye on the centre wire and haul it up to the operating height. Make sure that you have some method of keeping it straight like a bungy cord to something below, or a sand bag etc.... Also make sure that the feed coax and choke coil point straight out at right angles or as close to possible for as far as you can manage. Connect to your SWR meter and radio.

I am assuming that you know how to use an SWR meter. If you do not, then read up. Starting at the bottom frequency of interest and working up the highest frequency of interest, make note of each SWR reading. If the SWR minimum is not within your band, then you will probably need to trim. If the SWR keeps falling as you go up in frequency them go outside, shorten both ends by an inch and retest. If the SWR starts lower and keeps rising, then lengthen each end and retest. Hopefully there is enough extra wires in the eyes to do this. Once a test run show the SWR reaching a minimum in the band the next step is easier.

Divide the frequency of SWR minimum by the desired centre frequency band of interest and multiply the result by the existing length of the antenna to find the correct length needed. Go out and make the "final" adjustment to match this length. Check your SWR one last time of course to make sure.

And there you have it. A simple dipole. Maybe not the best dipole, maybe not the most efficient antenna, but you made it. There are many other aspects of antenna installation that I will not go into here like safety and grounding, but the library should be of great use here and I recommend that you do some real research into these other aspects before installing any antenna. I don't want to be responsible for any more accidents. None of the above is new stuff, just a rehash of many articles and instructions from the past. Have fun and don't worry about perfection too much.

Les Nagy

389. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-17 06:29:37 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8ng0oh$h32$6@bashir.peak.org>
Source record: 182551
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

In rec.radio.cb Rosco <rvaagen@hotmail.com> wrote:

: How about remote mounting the antenna for the field strength meter outside
: and monitoring it from the shack?

That could be done. The Bird wattmeter has the capability of remote
location of the sensor section. But you need a conversion chart to
figure out the SWR.

I have never worried about the actual ratio - just tuned for minimum
reflected power at the frequency where I wanted the antenna to be resonant.
This assumes that the antenna will be 50 ohms when the SWR is lowest, not
necessarily a proper assumption. But it is a quick and dirty method that
produces at least acceptable results.

If I want maximum performance, I just use a field strength meter and
don't even bother with the SWR meter.

--
Bill Nelson (billn@peak.org)

390. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399E2C9B.925A4039@qth.com>
Source record: 182319
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Andrew, first the insulators ARE available at Home Depot, get a few feet of PVC about 1.5-2" stuff, cut in 4 or so inch lengths, drill holes ...voila!! Insulators, BUT if your wire is good stuff and well covered in insulation, it probably wont matter much, maybe a bit on rainey days (dunno, we havent had any in years here in Odessa.)
My full wave 80 meter loop is in the trees , literally, up at about 25 feet..Hey thats a big tree in odessa...it works fantastically on 80 and 17, plus resonably well on most any. It is feed directly with coax nothing but a coax wound 1to1 "collins balun" too keep rf off the coax...Its resonant at 3.922, where you can ususally hear me on Sunday nites after 8 central, as backup on the Continental Traders net...Join us if you can...more height is BETTER....but dont pass it cause you cant get it WAY up there...73 Murray

Set'em up Joe wrote:

> Greetings,
>
> The 2000 ed. of The A.R.R.L. Hndbk. lists a project to
> throw up a 1 wavelength horizontal loop they call, " The Loop
> Skywire." It's cheap, I've got the wire (500ft. roll of 14AWG ins.),
> and the trees to throw up it up as a lop-sided horizontal Quad, in
> effect. So ,okay go for it.
>
> What I'd like is feedback on a couple of questions. First
> is insulators. I can scavenge two egg-types but getting more
> means basically a 2 hr. expedition and more money. They're not
> a Home Depot / RS item unless I but another RS SW Ant. Kit.
> Since the wire is insulated, how important are they?? Just to
> counteract line tension by swaying trees?? Maybe I'd rather just
> take my chances if that's true.
>
> Secondly, this loop certainly gets a glowing review from
> the Hndbk. Do you agree with it? Experience with it? To compare,
> currently I'm using a 66ft. random wire 20ft up and I'm using it for
> my reciever (RS DX-392). So this loop is for RX only. Not sure
> how much higher I can get with the loop (especially if I have to
> climb up and tie off insulators). Which is another issue: Even if
> insulators are worth it, would it be better to go for max. alttitude
> of the circuit and just forgo the insulators? I have at least two
> possible "routes" to use; the first is a shade over 40M wavelength,
> the 2nd a shade over 80M wavelength. I wanted to go with the
> 80M for broader band coverage. I'm a newly licensed ham and
> don't have more than Tech. privs. right now so this is just to make

> for some better DX'ing on my reciever. Seems easy and cheap,
> what do you think?
>
> THX,
>
> Andrew
> KG4JBM

[One or more binary attachments are retained only in the source text.]

391. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399E2CEA.53429245@qth.com>
Source record: 182320
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Kmart does in Texas...but they call em OWLS....whooooooo whoooo

Set'em up Joe wrote:

> Man, are those pesky crows bugging me. Now in my
> life the one thing that really scares the crap outta me is my wife.
> My mother-in-Law tells me I should Thank God for her. I do.
> I tell my Mother-in-Law that every morning, the first thing I do
> is I roll over and see my wife asleep in the bed and say,
>
> " Jesus H. Christ. Thank God!!! "
>
> I figure a good plastic wife out back would really give those
> crows second thoughts about landing on MY wire. Yep.
> Does anybody know who sells those Plastic XYL's ???
>
> THX,
>
> Andrew
> KG4JBM

[One or more binary attachments are retained only in the source text.]

392. Re: Sheet of metal as a ground plane for an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399E2DE6.938E3EC9@qth.com>
Source record: 182321
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

When it come to ground, especially on a mobile antenna, just remember one thing.....MORE IS BETTER .. That covers it,...chicken wire or fence wire is just as good as metal sheets and you can roll up a good 20 ft section and put it in a closet...be sure to also attach it(the ground wire) to any rails, gutters or what else...good luck ....Murray

jason_hsu@my-deja.com wrote:

> I think I have an idea on how to ground an antenna for the apartment HF
> shack I still haven't equipped yet.
>
> Some of the things I have learned in my 007 mission to obtain the
> equipment I need to operate HF:
> 1. Unless I use a balanced antenna (like a loop or dipole), I must
> establish a good ground/counterpoise. How important this is depends on
> whom I talk to.
> 2. In mobile operations, the vehicle itself provides a ground plane.
> Thus, there is no need to mess around with ground rods or 1/4
> wavelength radials.
>
> I am seriously considering using a Bugcatcher antenna at my apartment.
> Can I use a sheet of metal (or a metal screen) instead of my car as a
> ground plane? If so, how large and thick must this sheet of metal be?
> If this setup can work, I can have a good temporary HF installation
> that I can bring inside when I am not operating. The fact that I live
> on the ground floor with no bushes or trees to conceal wires means that
> I cannot have an outdoor antenna that is sufficiently stealthy. The
> alternative seems to be a temporary installation that I keep outside
> only for the few hours per week I expect to operate.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/tech-dwdm.html
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

[One or more binary attachments are retained only in the source text.]

393. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399E2DD6.B5014F1E@eznec.com>
Source record: 182322

I found your experience really interesting, because I've used the acetic acid stuff for decades on all sorts of material, including copper, aluminum, and copper, and never seen any corrosion at all, even after years of encapsulation. Barry Ornitz, I believe it was, pointed out that RTV formulations vary widely, so apparently some are ok and some not. In the U.S. you can get GE Silicone II, which doesn't smell like acetic acid, at home handyman stores. I've found that it can take much longer to cure, though, and sometimes it seems to never cure. Of course, there are numerous industrial formulations if you want to go that route.

Roy Lewallen, W7EL

Roger Halstead wrote:
> . . .
> A major word of caution though.
> Any of the RTVs that smell like Acetone do so because you really are
> smelling Acetone.
>
> In confined places with prolonged contact, Acetone is corosive to copper,
> aluminum, and solder.
> . . .

394. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399E2EA1.4222D607@eznec.com>
Source record: 182323

If you add capacitance hats, it'll reduce the amount of inductance you need, will raise the feedpoint resistance some, and will make the antenna less narrowband. That is, they'll act a lot like you're just lengthening the antenna. The tradeoff is, of course, increased mechanical complexity. There won't be any significant improvement in performance in your case except a bit broader bandedness.

Roy Lewallen, W7EL

w4hij@my-deja.com wrote:
> . . .
Just a stab in the dark....would the addition
> of "capaticance hats" do anything at all?? Seems I have seen them used
> on loaded antennas before...
> Thanks again,
> 73 Michael
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

395. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <n5grps4lfi2jnb0h85hcarmf3v0tjeumr3@4ax.com>
Source record: 182324

"Dan K Nelson" <w6dkn@qsl.net>
shared these priceless pearls of wisdom:

->
->RG-58 has about 5 db loss per 100 foot at 150 mhz. Even a 50 foot run will
->result in a loss of about half of the power fed into it, as well as half of
->the received signal strength. I would think that a 25 watt marine radio on
->the open waters would opt for max range and reliability, therefore he would
->probably want to use an LMR-400 or 9913 type cable to keep feedline losses
->at a minimum. If so, a UHF or type N connector would be appropriate.

Y'all ever actually DONE one of these installations before, sir, or spent a
dozen or so years in the industry?

When you have, please offer your "think" as opposed to standard practice.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

396. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <spqaol3487v179@corp.supernews.com>
Source record: 182369

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:399cfd60.452812@news.akorn.net...
> >> By far the biggest worry is some connectors, like those from Radio
> >> Shack, overheat at high power levels (over 1000 watts) during extended
> >> transmissions.
> >
> >The ones I see at my local Rat-Shack are made by Amphenol, and use Teflon
> >dielectric. These are a problem at high power levels?
>
> The ones I am thinking of have a brownish plastic dielectric. They
> swell up and stink at 1500 watts or less on RTTY or extended time on
> CW.

I think those are the ones with the Penolic dielectric. I have a few of them
too, kicking around in my junk box. I don't use them.

> Into matched loads at HF, you'd be amazed at what cable and connector
> can take what power. But any N has always been the weak link in my
> systems.

Somebody said, on this NG awhile back, that the DIN 7/16 inch connector
series was much better than "N" connectors for power handling.

> I take N females on my 7/8 Heliax and bore out the center and
> shorten it. I add a center pin from a SO-239 with polyethelyne tubing
> or PTFE tubing over the pin as an insulating sleeve. That gets rid of
> the weak spots in case I accidentally hit the wrong antenna on the
> wrong band at full power.

I have to think about this. I would have thought making this modification
would destroy the constant Z characteristic of the connector.

> If I leave an N in line, it becomes toast. Generally on the furthest,
> highest, hardest to reach connector in the middle of the rainy night
> during a contest.

Boo - Hiss!! Thats no fun!

--
Leland C. Scott
KC8LDO

397. Re: how to make end feed antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8njc06mrt1@nnrp1.deja.com>
Source record: 182370

Hi Tom,
Yup, I know this is MUCH less than ideal.... when in a pinch try
anything... Is feed line radiation bad in a marginal set up? Probably
not so long as it isn't in the shack! Hell, there are times I'd wish
for radiation from anything...

I am just passing along one of the ARRL designs that I have tried and
made Qs on. I was stuck 'end feeding' my ladder line multiband because
of the real estate I had to work with.. Jumped the centers together and
moved the ladder to the end... it did seem to tune and radiate, but
then wet noodles make Qs on a good day. Hee Hee
73
Den W2DEN _._

In article <399bf55b.25137949@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> On Thu, 17 Aug 2000 13:08:20 GMT, Den <dennis.spiess@reckitt.com>
> wrote:
>
> >You can end feed a 'dipole' with ladder line through a balun and a
> >tuner.... Usually hung horizontal. This will give you a multiband
> >antenna from the dipole length and up in freq.
>
> Hi Den,
>
> That only works if the balun is imperfect, and in every case where the
> antenna radiates the feedline will also radiate.
>
> Any end-fed antenna needs some sort of "counterpoise" to push against,
> if you don't give it one it will find one on it's own, and the results
> can be undesirable.
>
> 73 Tom
>

--
Den Spiess

Sent via Deja.com http://www.deja.com/
Before you buy.

398. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8njckcnjm1@nnrp1.deja.com>
Source record: 182371

Hi Mike,
I'll leave the techie stuff, what will or will not properly measure the SWR, to the techies.... beyond my knowledge.
From experience:
You can increase the sensitivity of a bridge type SWR meter by adding a simple 1 transister DC amp to the meter. This was commonly used in QRP work and was published for years in the ARRL Handbooks. If I remember correctly it was an NPN xister driven with a 9 v battery.
If you e-mail me @ dspiess.idt.net I will look up the exact circuit at home and give it to you.
I have added this amp to a Radio Shack SWR bridge and used it with an HW-8 an 2 watts or so and had lots of meter gain to spare.
An op amp might work too, but I have not seen an actual circuit using one.
73
Den W2DEN _._

In article <399c0329.14827743@news-server>,
mthompson14@yahoo.com wrote:
> Hello,
>
> Can anyone help me on how I would go about making an SWR meter for
> the VLF and LW range. I have a radio shack SWR that is good over 3-30
> Mhz, with one watt applied but is it possible to make one with a freq
> range of say 1Khz to 500Khz? With less then a watt applied power?
>
> Thanks
> Mike T.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

399. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000818090631.16289.00000258@ng-cr1.aol.com>
Source record: 182372

Hi Roy--

The AD8307 provides RSSI over a 90-dB dynamic ranage with 1-2 dB accuracy, and up to 120-dB range with a front end. At over $6.00 a pop, though, I don't see rec.radio manufacturers lining up to buy them. By amateur equipment standards, that's a very expensive part.

Accurate S-meters do exist, but mostly on commercial radios. For example, the Ten-Tec RX340 meter covers a 120-dB range and is calibrated in both dBm and S-Units. According to the HP-8640B, it's dead on over most of that range--and compensates when the attenuator or preamp are switched in (no change in reading)

Of course, the psychological effect is boring, as you suggested. 120 dB is a huge dynamic range and the meter movement doesn't flap around much--ruining its entertainment value. Also, the scale resolution isn't very good for really critical readings (the scale's accurate, but marked in 5-dB increments)..

In fact, it's possible to more accurate on-air comparisons by using a step attenuator and referencing signals to a single point in the least-accurate range of a conventional S-meter meter (that part where where a 2-3 dB change equals a lot of motion--usually between S2 and S8 before the response really begins to compress).

I've found the "sample and hold" hang function on some of the newer rigs is especially useful for comparing SSB signals.

Rick K1BQT

400. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000818091529.16289.00000260@ng-cr1.aol.com>
Source record: 182373

If you need only 60-70 dB dynamic range, you can build a tunable field-strength meter using one of the cheapo FM ICs and use the RSSI output. Those tend to be very accurate. Filter it well at the IF and it will only see the specific signal you want to look at in a crowded field. Ignore the FM limiter section and detect off the RSSI line. You can even add it as a parrallel IF strip in an existing receiver (as long as there's no AGC ahead of the mixer and you keep the BFO signal out of it's IF).

Rick K1BQT

401. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <399D3AF3.50A8B773@ix.netcom.com>
Source record: 182374

jack albert wrote:

> Trying to purchase a new house without Antenna restrictions or covenants is
> really difficult and
> I'm a little bit confused on the FCC policies concerning the private
> contractual agreements.
> (I snipped the FCC's comments on a petition that was presented by the ARRL)
>
> I was told by a real-estate agent that restrictions and covenants are
> similar to leans against the property and
> are held as public record at the County Dead Office. They are not signed
> by or agreed to by persons that
> purchase the property. They are adopted by the land developers and I guess
> you can that they are policed
> by the Home Owners Associations!
>
> If I purchase the property and pay cash for it but I don't sign the covenant
> or agreement. How can that be an
> agreement between two parties and how can I be restricted by the covenants?
>
>
> -----SNIP---------

An attorney here advised that "The CC&R's are encumbent on the property whether you signed them or not."
In either case your rights to install an antenna have been waived if the CC&R's so state.
Really this is not a matter of right or wrong in an emotional, common sense judgement. Freedom of speech, valid FCC license etc. It is a matter of what is the legal judgement and more times than not -- the legal system sides with the CC&R's.

Note however that in CA some HOA's have given in and allowed small TV dishes -- a CA law entered the scene. However other HOA's are not allowing them, pending court action or an arbitration board.

For some web pages regarding all this -- see URL:
http://ac6v.com/page9.html#CC&R

Read the CC&R's carefully -- one here in San Diego states "There will be no Shortwave Operations in the complex"
Gee -- scrap you cell phones and cordless phones huh!!

Bottom line -- don't buy a home with CC&R's!!!!

--
73 From Rod In Oceanside, CA
Amateur Radio & DX Reference Guide
Featuring 100+ Pages, 750 Indexed Topics & 6000 Links
http://ac6v.com/
Over 770,000 Hits On The Counter

402. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <Erbn5.14098$Cc2.485719@newsread1.prod.itd.earthlink.net>
Source record: 182375

Excellent comments, Roy. There's more - I'm aware of one instance where the buyer took his own attorney to the closing. The attorney informed the gathering that the buyer was not going to pay some of the fees commonly paid by the buyer in the closing process. There was a bit of a delay as the details were discussed and paperwork changed. The result was the buyer saved enough to pay his attorney for the session, and buy a nice antenna with the remainder.

--
Floyd Sense - Angier, NC
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:399C6FAD.789B3DF@eznec.com...
> Rich Griffiths wrote:
> > . . .
> > Don't try to be your own lawyer, and don't accept that realtors know the
> > law -- not even property-related law.
>
> Good advice. There's another serious mistake I see people making when it
> comes to lawyers. A lawyer might be present at the closing, or otherwise
> involved in the sale, and people sometimes mistakenly assume that his or
> her legal advice should be followed. That's not how it works. If *you*
> hire a lawyer, that lawyer's job is to look out for *your* interests and
> no one else's. Similarly, a lawyer hired by the seller, realtor, lender,
> or someone else is looking out solely for his or her *client's*
> interests, not yours. These may be at complete odds with your interests.
> So if legal advice is needed, hire your own lawyer to watch out for your
> interests, and don't think for a minute that anyone else's lawyer will
> do that.

403. What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000818112941.08534.00000008@ng-cb1.aol.com>
Source record: 182376

A lot of nice posts about Antennas.

No bickering, no personal attacks, no threats of law suits.

Am I on the right news group or did Chips computer blow up ?

73 Al Lowe N0IMW

404. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8njlakqnv1@slb2.atl.mindspring.net>
Source record: 182377

Chip is now resting comfortably in my kill file. That did it for me.
--
CW
KC7NOD

"Arrow146" <arrow146@aol.com> wrote in message
news:20000818112941.08534.00000008@ng-cb1.aol.com...
> A lot of nice posts about Antennas.
>
> No bickering, no personal attacks, no threats of law suits.
>
> Am I on the right news group or did Chips computer blow up ?
>
> 73 Al Lowe N0IMW

405. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399D5AAD.B6621AB9@hiwaay.net>
Source record: 182378

Al- You are SO right- nice!

His computer is still functioning- there is a mini love fest going on on the private list, interspersed with notice that he cant talk about the two more patents he expects out soon.

He has also offered to make copies of THE PATENT for anyone who sends in a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT qualify. Guess I'm out.

He will be busy till after Labor day, so copies will be delayed.

Bill- W4BSG

Arrow146 wrote:
>
> A lot of nice posts about Antennas.
>
> No bickering, no personal attacks, no threats of law suits.
>
> Am I on the right news group or did Chips computer blow up ?
>
> 73 Al Lowe N0IMW

406. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399D4457.44ED@pacbell.net>
Source record: 182379

Bart Rowlett wrote:
>
> Hi Tom,
>
> Donaly wrote:
> >
> >
> > Maybe someone would like to comment on the case of two harmonic
> > oscillators
> > coupled with a capacitance. If the capacitance is large enough
> > (the coupling between the oscillators is great enough) the system
> > will have two resonances, one where the currents through
> > the oscillators go in the same direction,
> > (and the voltages across the capacitor are 180 degrees out of phase)
> > and one where the currents are 180 degrees out of phase (and the
> > voltages across the capacitor are in phase and equal).
>
> Are you referring to the double peaked response characteristic of a
> cascade of two overcoupled resonators? Tuned IF transformers are a
> classic example. The effect is also important in the design of Yagi and
> other parasitic antennas. Interestingly, the effect is desired, but
> seldom achieved in the so called double Bazooka antenna where shorted
> 1/4 wl stubs are placed in parallel with the feedpoint of a 1/2wl dipole
> in an attempt to broadband the antenna.
>
> Good question, but a bit off topic for this thread. I respectfully
> suggest you either wait and see if this thread progresses to the point
> where optimization of the phase inverter is being discussed or perhaps
> begin another thread.
>
> IMHO, the double bazooka would be an excellent topic for discussion in
> this forum.
>
> >
>
> bart
> wb6hqk

Hi Bart,
the reason I was interested in the behavior of overcoupled
resonators vis a vis collinear antennas is that, if one could
consider each element of such an antenna as a simple harmonic
resonator coupled either by an electric field or a capacitor,
one could come up with a very elegant and simple explanation as

to why Tom Rauch's split inductor coupler worked, while coupling with only a lumped element tank circuit was problematical. I realize this is a stretch, but it's intriguing, nonetheless.

Using the coupled resonator approach I can envision problems with the double bazooka antenna because of the inevitable phase shifts and concomitant change in pattern, but, you're right, that's the subject of another thread.

Tom Donaly KA6RUH

407. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399D6173.EC6E360C@wb6hqk.ampr.org>
Source record: 182380

Bill Aycock wrote:
>
> Al- You are SO right- nice!
>
> His computer is still functioning- there is a mini love fest going on on
> the private list, interspersed with notice that he cant talk about the
> two more patents he expects out soon.

Has there been any cogent explanation of the claims? Obviously there won't (can't) be any significant critique but I wonder if he's making any attempt to actually describe (as a teacher) what the patent is all about. I would be particularly interested in his explanation of how Krauss et all managed to botch the theory of small loops.

Of course that would be helpful.

bart
wb6hqk

408. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: JohnHurst <hurstjsj@gte.net>
Message-ID: <399D6A69.EBF93AF0@gte.net>
Source record: 182381

K1BQT wrote:
....

> Of course, the psychological effect is boring, as you suggested. 120 dB is a
> huge dynamic range and the meter movement doesn't flap around much--ruining its
> entertainment value.

The ad boys at National, during the early fifties, bragged about their "lively
S-meters"
As I recall on an NC125 most signals were between S8 and full scale. Certainly was
a pleasure giving out signal reports w/o having to appologize for having a
"scotch" meter :) !
John, KU6X

409. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <399D6A4F.2D47B924@wb6hqk.ampr.org>
Source record: 182382

Hi Tom,

Donaly wrote:

> Hi Bart,
> the reason I was interested in the behavior of overcoupled
> resonators vis a vis collinear antennas is that, if one could
> consider each element of such an antenna as a simple harmonic
> resonator coupled either by an electric field or a capacitor,
> one could come up with a very elegant and simple explanation as
> to why Tom Rauch's split inductor coupler worked, while coupling
> with only a lumped element tank circuit was problematical. I realize
> this is a stretch, but it's intriguing, nonetheless.

The basic operation of the system is achieved if the phase inverter is considered to be a center tapped autotransformer. The center tap is grounded and the other two ends connected in the radiating elements. The rub is that the magnetizing impedance of the transformer needs to be 10,000 ohms or greater. Virtually impossible at MF and HF without resorting to some sort of resonant circuit like a tank or stub.

Choice of the L/C ratio, or differential mode characteristic impedance of the transmission line stub, results from carefully trading off several performance parameters such as system bandwidth, broadside gain and sensitivity to geometric and environmental changes. As far as I know, optimized systems always turn out to be overcoupled and exhibit multiple resonances _outside_ of the useful system bandwidth. Remember, every 'hump' in the system response is associated with a phase shift of up to 180 degrees. For the collinear to be successful, the phase relationships need to be maintained within 60 degrees or less. Therefore, the useful bandwidth for collinear operation will be less than the bandwidth of any single resonance peak.

> Using the coupled resonator approach I can envision problems with the
> double bazooka antenna because of the inevitable phase shifts and
> concomitant change in pattern, but, you're right, that's the subject of
> another thread.

I think it's the other way around. The phase shifts associated with the multiple resonances are what limit the bandwidth of the collinear antenna. The whole point of adding the resonator in the bazooka is to introduce an additional frequency dependent reactance (loosely speaking, phase shift) which compensates the frequency dependent phase shift inherent in the center fed dipole antenna. The objective is to widen the _amplitude_ bandwidth of the complete system. Since there is only one radiating element in the system, there is no relative phase to

control or possibility of pattern distortion. Unfortunatly, the Bazooka doesn't really work as intended in practical amateur implementations for 75/80 m where broadbanding is most needed. The technique is integral to the broadbanding schemes used in many modern systems of high complexity such as multiband curtain arrays.

bart
wb6hqk

410. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399D7439.F3B1FD13@eznec.com>
Source record: 182383

Insulters can order a copy for $3.00 from the Patent and Trademark
Office, http://uspto.gov.

Roy Lewallen, W7EL

Bill Aycock wrote:
>
> Al- You are SO right- nice!
>
> His computer is still functioning- there is a mini love fest going on on
> the private list, interspersed with notice that he cant talk about the
> two more patents he expects out soon.
>
> He has also offered to make copies of THE PATENT for anyone who sends in
> a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
> qualify. Guess I'm out.
>
> He will be busy till after Labor day, so copies will be delayed.
>
> Bill- W4BSG

411. Experience with MFJ-1798 multiband vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Mark Barton <mrbarton@ix.netcom.com>
Message-ID: <399D7FB2.3EA27F73@ix.netcom.com>
Source record: 182384

Hi Group,

I'm contemplating the purchase of an MFJ-1798.
Is it really all things to all men?

--Mark Barton WA6FTU

412. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399d85e5.35407959@news.akorn.net>
Source record: 182385

On Fri, 18 Aug 2000 08:24:28 -0400, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

>> The ones I am thinking of have a brownish plastic dielectric. They
>> swell up and stink at 1500 watts or less on RTTY or extended time on
>> CW.
>
>I think those are the ones with the Penolic dielectric. I have a few of them
>too, kicking around in my junk box. I don't use them.

No, it is plastic. I have no idea what kind of plastic, I suspect
maybe re-cycled Hefty trash bags that are still full of rottting
leaves.

It's the worse stuff I've even seen.

73 Tom

413. Re: HELP: RF grounding advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <PJfn5.273$u95.620836@news.ntplx.net>
Source record: 182386
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment

jason_hsu@my-deja.com> wrote in message news:8n7jqsje1@nnrp1.deja.com...

> I am a newly minted, no-HF-experience General bewildered by various
> issues of setting up an HF shack. I'm trying to gain as much knowledge
> as I can before I buy the rest of my equipment.

Hi, Jason,

See:

http://www.arrl.org/tis/info/grounding.html

and

http://www.arrl.org/tis/info/lightning.html

for some good info on grounding and lighting protection.

73,
Ed Hare, W1RFI

414. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399d86b2.35612794@news.akorn.net>
Source record: 182387

On 18 Aug 2000 13:15:29 GMT, k1bqt@aol.com (K1BQT) wrote:

>If you need only 60-70 dB dynamic range, you can build a tunable field-strength
>meter using one of the cheapo FM ICs and use the RSSI output. Those tend to be
>very accurate. Filter it well at the IF and it will only see the specific
>signal you want to look at in a crowded field. Ignore the FM limiter section
>and detect off the RSSI line. You can even add it as a parrallel IF strip in
>an existing receiver (as long as there's no AGC ahead of the mixer and you keep
>the BFO signal out of it's IF).

Switching in extra filters that match the passband of the filters in
my receivers just so I can use a meter I have to re-scale doesn't
sound like a fun project.

I think a better solution is, while rescaling the meter, to just make
it match the slope of the receiver AGC.

Better yet, I just won't worry about having one of the 3 good S
meters in the world.

73 Tom

415. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399d8886.36080628@news.akorn.net>
Source record: 182388

On 18 Aug 2000 15:29:41 GMT, arrow146@aol.com (Arrow146) wrote:

>A lot of nice posts about Antennas.
>No bickering, no personal attacks, no threats of law suits.

Hi Al,

Aug 15, full moon.
Aug 16, waning moon.
Aug 17, more calm
Aug 29, new moon and increased activity.
Sept 13, this NG will be an absolute mess.
Sept 14, waning moon
Sept 15, more calm

etc. etc.

just like a clock.

416. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <399D934F.5C87F8E7@mlecmn.net>
Source record: 182389

mthompson14@yahoo.com wrote:

>
> Can anyone help me on how I would go about making an SWR meter for
> the VLF and LW range. I have a radio shack SWR that is good over 3-30
> Mhz, with one watt applied but is it possible to make one with a freq
> range of say 1Khz to 500Khz? With less then a watt applied power?

An article I wrote for the LOWDOWN describes a simple LF antenna analyzer. The analyzer itself does not measure SWR, but the article contains a schematic and discussion of the type of resistive SWR bridge shown in the ARRL Antenna Book, and also discusses how to make it work for impedances other than 50 ohms. It's available in the File Libraries section of the LWCA web site at
http://www.lwca.org/library/articles/k0lr/lfanalyz/lfanalyz.htm

--
Lyle, K0LR

http://www.computerpro.com/~lyle

417. Info On 2 Or 4 Bay Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: h175a@multipro.com
Message-ID: <8nk7ivovj1@nnrp1.deja.com>
Source record: 182390

Hi,I need info on the supplies needed and how to build a 2 or 4 bay dipole for a repeater.

Sent via Deja.com http://www.deja.com/
Before you buy.

418. Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: w4hij@my-deja.com
Message-ID: <8nk82spjp1@nnrp1.deja.com>
Source record: 182391

Recently I set out to build a "rotatable dipole" for 20 meters. It seemed the best way to get coverage in all directions as well as realize a slight amount of gain and some directivity. The first problem was that I did not have the turning radius for a full size antenna so I used a program I got off the web somewhere (lost the url) called "reducer" which gave me the data I needed to reduce the antenna length by using loading coils. The antenna is about 60% in size, right at about 20 feet long and the coils are 1 and a half inches in diameter with 22 and a half turns each for a load inductance of 6.59 uh. All of this is per the calculations of the reduction program. The problem is the antenna will not match! I cannot get any reasonable SWR reading or the thing to take any power at all. No amount of pruning or lengthening accomplishes anything. I have always been able to get dipoles to take power before just by simple pruning. I am not a novice at building antennas but this is my first experience with loading coils. Am I missing something? Perhaps I need some type of matching circuit at the feedpoint...the reducer did not specify this though. Any of you antenna whiz kids out there got any ideas? I am completetely frustrated. By the way I did check the coax for shorts and open conductors so that is ruled out.
Thanks for any help...
73, Michael W4HIJ

Sent via Deja.com http://www.deja.com/
Before you buy.

419. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: tegwilym@my-deja.com
Message-ID: <8nka50$s1q$1@nnrp1.deja.com>
Source record: 182392

I have one of these that I bought off this guy on Ebay:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=412602529

I have the antenna strung down my hallway (about 13 feet from one end
to the other) upstairs in my condominium. I have had trouble tuning it
with any power going trough it, when it appears to be tuned, I can't
hear much. When I can hear something, the SWR is all screwed up.
Sometime I even get noises out of my stereo or computer speakers when
tuning so that isn't right! It seems to receive pretty well, but I
think I am having some RF problems that I can't figure out.

Arrghh!!! Stupid antenna restrictions! :-(

Tom KA7VIK
Seattle

> ++++++++++++++++
> I am Chuck K3FT. I currently use a SLINKY (tm) antenna at my apartment
> and operate 80 - 10 meters with it. My cost? approximately $ 8.00 for
> the four Slinkies (tm) (yes it's a trademarked name, believe it or
not!
> HI), about 20 bucks for RG8X type cable and a couple of bux for
> incidentials. That was about it. In other words, I operate 80 - 10
> meters with a Slinky(tm) antenna mounted on my apartment balcony
> outside and it cost me about 25 - 30 bux total INCLUDING COAX! It's
> not the neatest and prettiest to look at.. but it fulfills three
> venerable Amateur Radio dictums - It's cheap, it works, and I built it
> so I learned something and had fun doing so.
>
> You can duplicate your own for LOTS less than the 40 bux he's asking

Sent via Deja.com http://www.deja.com/
Before you buy.

420. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: tegwilym@my-deja.com
Message-ID: <8nkakdsgc1@nnrp1.deja.com>
Source record: 182393

We have pretty wimpy thunderstorms here in Seattle, but I have seen arcing in my equipment before. Before I moved into my condo, I lived with my parents and had dipoles, beams, verticals and lots of wire on our roof with about 4 feedlines into my bedroom. I would wake up at night during a thunderstorm counting the seconds between the thunder and the flash and run out of the room when it got close! More than once I have seen (and heard) electricity arcing in my antenna tuner. I always had my radios unplugged though. I am sure I even saw an arc between the center conductor and the ground shield of a coax cable once that was unplugged. Even when the lightning was a couple miles away I would hear a snap as it flashed outside. Pretty creepy!

Sent via Deja.com http://www.deja.com/
Before you buy.

421. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <399DAA43.1C930FCE@agilent.com>
Source record: 182394

CW wrote:
>
> Chip is now resting comfortably in my kill file. That did it for me.
> --
> CW
> KC7NOD
>

Hello, CW,

Gee, how did you set up your kill file? Several months back I set up a kill file for "Frac", "fractal", "Chip", "N1IR", etc., etc., and nowadays that doesn't even come close to getting rid of all the garbage. The threads are too varied and too insidious now to handle with a simple kill file. I long for the old days when this was a really great newsgroup.

In July, I was off for a couple of weeks or so because of work and when I got around to checking the newsgroup again, out of 1850 unread messages some 59% were of the bickering, abusive kind (you know the type) going to or from fractenna (I actually counted them). Can you believe that? At one point in July, 2000, there were eight, separate, endless, simultaneous threads on the matter. For most of the month, there were at least six. Unbelieveable. It's been like this since almost the beginning of the year.

I used to get a lot out of this newsgroup. It's not nearly as useful and educational to me as it once was, because I think people who have something to say are simply getting crowded out. It's like trying to get a word in edgewise with a gasbag at a party. I can't believe we have to put up with this, but, after all, I guess there is a First Amendment.

I also realize I've just added to the problem, but if I were face-to-face with you I'd still say what I just said. As Mr. Sabin sometimes says, I'm not interested in any replies to this post and I don't wish to further my comments on this subject. Please don't bother replying to my rhetorical question.

Disgustedly,

Al W6LX

422. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399DAFAE.346EDE26@cac.net>
Source record: 182395

Bill Nelson wrote:

> Bob Miller <bamiller@texas.net> wrote:
> :>RatShack, but I'd really like to do this right... Is there a way to test field
> :>strength without said meter?
>
> : You might try coupling a low-wattage light bulb to your antenna, and
> : then tune for maximum brightness. When I was a kid, I used to tune up
> : my transmitter by just connecting a light bulb across the antenna
> : terminals.
>
> Unfortunately, that changes the input impedance of the antenna system. It
> is the same as connecting an paralled inductor and resistor across the
> input - not necessarily a desireable thing.
>
> --
> Bill Nelson (billn@peak.org)

Something I should mention, that was pointed out to me via email...

When I mentioned that I wanted to build the dipole to be able to handle 200 watts, I didn't mean I was going to run 200 watts on CB. My Cobra 2000 only puts out 18 watts PEP on sideband, and 4 swing 16 PEP on AM. RMS the numbers are much lower (4 to about 7 or 8 on AM).

I'm overbuilding the antenna because I am studying to get my ticket. When I do, and I'm hoping to go straight to General class, I was hoping to modify the antenna to transmit well on 10 meters for that very purpose. On 10 meters, I may run up to 200 watts. But not until I have my ticket. I have an old tube amp that my stepfather passed down to me. It's not hooked up. It's waiting for the day that I do get my ticket.

I hope I didn't offend anyone, or put anyone off with this misconception

73's

-SSB

423. Re: SWR Meter for LW & VLF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Cortlund Richmond <crichmon@usa.alcatel.com>
Message-ID: <399DB2CE.8AA9C38A@usa.alcatel.com>
Source record: 182396

Some time ago I bought an SWR/power bridge at a flea market -- it turned
out to be optimized for 500 KHz.

Cortland
(ka5s@saber.net)

Den wrote:

> Hi Mike,
> I'll leave the techie stuff, what will or will not properly measure the
> SWR, to the techies.... beyond my knowledge.
> From experience:
> You can increase the sensitivity of a bridge type SWR meter by adding a
> simple 1 transister DC amp to the meter. This was commonly used in QRP
> work and was published for years in the ARRL Handbooks. If I remember
> correctly it was an NPN xister driven with a 9 v battery.
> If you e-mail me @ dspiess.idt.net I will look up the exact circuit at
> home and give it to you.
> I have added this amp to a Radio Shack SWR bridge and used it with an
> HW-8 an 2 watts or so and had lots of meter gain to spare.
> An op amp might work too, but I have not seen an actual circuit using
> one.
> 73
> Den W2DEN _._
>
> In article <399c0329.14827743@news-server>,
> mthompson14@yahoo.com wrote:
> > Hello,
> >
> > Can anyone help me on how I would go about making an SWR meter for
> > the VLF and LW range. I have a radio shack SWR that is good over 3-30
> > Mhz, with one watt applied but is it possible to make one with a freq
> > range of say 1Khz to 500Khz? With less then a watt applied power?
> >
> > Thanks
> > Mike T.
> >
> >
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

--
Cortland Richmond

424. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399DB3A9.51578BC6@eznec.com>
Source record: 182397

This antenna will be quite narrowbanded, so you'll have to get the loading inductance pretty close to see any resonance within the band. The amount of inductance depends strongly on the dipole's diameter, and much less on the antenna's height. According to EZNEC, you need about 5 uH total, or about 2.5 uH per side for a 1" diameter antenna, and 7.8 uH total for a dipole made from #12 wire. When resonant, the feedpoint impedance should be about 23 ohms plus coil loss for either diameter, so you should see about 2:1 SWR when you get the loading right. If you want better than that, you'll have to use some sort of matching arrangement, but most rigs won't complain about 2:1. If you don't have an antenna analyzer, dip meter, noise bridge, or other way to find resonance, I'd temporarily add some inductance, then tap down on the coils until you find resonance, then make a more permanent connection after you know about the right coil size. The antenna will be more narrowbanded than a full size dipole, but otherwise just as good for all practical purposes (if you can keep the coils clean and dry).

Roy Lewallen, W7EL

w4hij@my-deja.com wrote:
>
> Recently I set out to build a "rotatable dipole" for 20 meters. It
> seemed the best way to get coverage in all directions as well as
> realize a slight amount of gain and some directivity. The first problem
> was that I did not have the turning radius for a full size antenna so I
> used a program I got off the web somewhere (lost the url)
> called "reducer" which gave me the data I needed to reduce the antenna
> length by using loading coils. The antenna is about 60% in size, right
> at about 20 feet long and the coils are 1 and a half inches in diameter
> with 22 and a half turns each for a load inductance of 6.59 uh. All of
> this is per the calculations of the reduction program. The problem is
> the antenna will not match! I cannot get any reasonable SWR reading or
> the thing to take any power at all. No amount of pruning or lengthening
> accomplishes anything. I have always been able to get dipoles to take
> power before just by simple pruning. I am not a novice at building
> antennas but this is my first experience with loading coils. Am I
> missing something? Perhaps I need some type of matching circuit at the
> feedpoint...the reducer did not specify this though. Any of you antenna
> whiz kids out there got any ideas? I am completetely frustrated. By the
> way I did check the coax for shorts and open conductors so that is
> ruled out.
> Thanks for any help...
> 73, Michael W4HIJ
>
> Sent via Deja.com http://www.deja.com/

> Before you buy.

425. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <2Ain5.1884$kM2.227149@newshog.newsread.com>
Source record: 182398

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:399d85e5.35407959@news.akorn.net...
> On Fri, 18 Aug 2000 08:24:28 -0400, "Leland C. Scott"
> <no-spam@junk-mail.net> wrote:
>
> >> The ones I am thinking of have a brownish plastic dielectric. They
> >> swell up and stink at 1500 watts or less on RTTY or extended time on
> >> CW.

I bought some that appeared to have a teflon dielectric and silver plating,
The first time I tried to solder the center connector it "unrolled" into a
"U" shape instead of remaining a tube. I also had a devil of a time getting
solder to stick to it.

I've also run into the ones with the brown dielectric and that stuff starts
melting when you are working on the braid, let alone the center connector.

If either of those were Amphenol then they have come out with something less
than their usual quality. <:-))

> >
> >I think those are the ones with the Penolic dielectric. I have a few of
them
> >too, kicking around in my junk box. I don't use them.
>
> No, it is plastic. I have no idea what kind of plastic, I suspect
> maybe re-cycled Hefty trash bags that are still full of rottting
> leaves.

Nah, They just smell that way!

Roger (K8RI)

>
> It's the worse stuff I've even seen.
>
> 73 Tom

426. Re: Experience with MFJ-1798 multiband vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: "Fredric J. Einstein" <feinstei@mw.mediaone.net>
Message-ID: <olfrpsgou1l8en6mit3k50tpdbahg8vdfh@4ax.com>
Source record: 182399

On Fri, 18 Aug 2000 11:25:54 -0700, Mark Barton
<mrbarton@ix.netcom.com> wrote:

>I'm contemplating the purchase of an MFJ-1798.
>Is it really all things to all men?
>

I reply:

1) Construction is extremely difficult, much moreso than other verticals. This is due to ambiguous instructions.

2) It does tune very easily.

3) I've had very good luck, performance wise with it on my roof.

4) It has a tremendous problem with RF feedback into the shack. You must RF-ground this antenna by using a RadioWorks 4K Line Isolator unit in between the transciever or linear and the antenna tuner. You must have a very short grounding braid connected to two or three 8 foot grounding rods very close to the shack to eliminate the RF feedback.

5) I'd use this antenna with an EXTERNAL antenna tuner. An external antenna tuner has the desirable side effect of not letting the antenna "see" the spurious resonances put out by your transceiver.

6) I think that an antenna with radials such as the Butternut or Hustler will give you lots better performance and fewer hassles in the long run.

Fred

N8UC -- Detroit

427. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399dbe72.49886409@news.akorn.net>
Source record: 182400

On Fri, 18 Aug 2000 21:34:24 GMT, tegwilym@my-deja.com wrote:

>I have one of these that I bought off this guy on Ebay:
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=412602529
>
>I have the antenna strung down my hallway (about 13 feet from one end
>to the other) upstairs in my condominium. I have had trouble tuning it
>with any power going trough it, when it appears to be tuned, I can't
>hear much. When I can hear something, the SWR is all screwed up.
>Sometime I even get noises out of my stereo or computer speakers when
>tuning so that isn't right! It seems to receive pretty well, but I
>think I am having some RF problems that I can't figure out.
>
>Arrghh!!! Stupid antenna restrictions! :-(

Hi Tom,

One problem I see with slinky antennas is the effect of all that inductance is ignored.

For example slinky's are often used as Beverages, but the promoters assume the impedance of the slinky is the same as a non-coiled conductor and ignore the loading and phase delays effects of all the hundreds of turns of wire.

How many turns are in the slinky antenna you have? How are they distributed, evenly? How is the antenna fed, like a dipole? How is the feedline routed? How far from house wiring is it?

Remember any antenna right in the middle of your house is going to be a problem, becuase it will couple to every conductor within a few wavelengths with an intense field. I'd expect RFI unless you run flea power.

Can you get anything outside? No balcony?

73 Tom

428. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <399DC048.950B1F72@roadrunner.nf.net>
Source record: 182401

A question re 'N' versus PL-259 connectors; based on information posted here.

So 'N' connectors may be a problem at high powers?

Reason I ask is that I was thinking about using 'N' type at base of my sailboat mast for marine VHF (max 25 watts) because it looked a lot more waterproof than the PL-259/SO-239 type. Whatever type I'll probably put it in a heat shrink sleeve anyway.

Any advice would be appreciated.

Terry S.

429. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000818192907.24028.00000044@ng-cb1.aol.com>
Source record: 182402

>Insulters can order a copy for $3.00 from the Patent and Trademark
>Office, http://uspto.gov.
>
>Roy Lewallen, W7EL
>
>Bill Aycock wrote:
>>
>> Al- You are SO right- nice!
>>
>> His computer is still functioning- there is a mini love fest going on
>on
>> the private list, interspersed with notice that he cant talk about the
>> two more patents he expects out soon.
>>
>> He has also offered to make copies of THE PATENT for anyone who sends
>in
>> a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
>> qualify. Guess I'm out.
>>
>> He will be busy till after Labor day, so copies will be delayed.
>>
>> Bill- W4BSG

Shhh, Lets all be real quite, maybe we won't wake him.
The last thing I want to know, is anything about his patents.

I have some antenna questions I would like to ask the news group,
but I need to do more research first. This would sure be a good time to ask.
Oh well.

73 Al Lowe N0IMW

430. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399dc4e4.51537315@news.akorn.net>
Source record: 182403

On Fri, 18 Aug 2000 20:31:28 -0230, Terry Sanford
<tsanford@roadrunner.nf.net> wrote:

>A question re 'N' versus PL-259 connectors; based on information posted here.
>
>So 'N' connectors may be a problem at high powers?
>
>Reason I ask is that I was thinking about using 'N' type at base of my sailboat
>mast for marine VHF (max 25 watts) because it looked a lot more waterproof than
>the PL-259/SO-239 type. Whatever type I'll probably put it in a heat shrink
>sleeve anyway.
>
>Any advice would be appreciated.
>
>Terry S.

N connectors are fine at power levels below a kilowatt. They are, if
properly installed more water resistant than UHF fitting assuming both
are exposed to water through lack of external protection.

If you heatshrink connectors, use flooded heatshrink to seal the
connection. Otherwise you are better off with tape and a sealing
compound like "vapor wrap".

The only thing worse than not sealing a connection at all is....
sealing it so water leaks in and can't get out. As a matter of fact,
I'd use flooded cable in any marine installation along with flooded
heatshrink.

73 Tom

431. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <askqpsgghidegb94ls90j1c69plc1kr97o@4ax.com>
Source record: 182404

Terry Sanford <tsanford@roadrunner.nf.net>
shared these priceless pearls of wisdom:

-
->Reason I ask is that I was thinking about using 'N' type at base of my
sailboat
->mast for marine VHF (max 25 watts) because it looked a lot more waterproof
than
->the PL-259/SO-239 type.

N is way, way overkill. BNC is smaller, lighter, a hell of a lot easier to put together, and comes in the right size for RG-58 cable, which is probably what you will want to use at 150 MHz. and 25 watts.

If you want it REALLY, REALLY waterproof, squeeze some silicone seal onto the connector, then shrink sleeve over that. Make sure that you shrink it from the center out to the edges and that some silicone "bleeds" out the end of the sleeving where it goes over the coax. It will take a knife and an afternoon to ever get it apart again, but it is guaranteed waterproof for life.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

432. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399DE460.1EFB19FE@qth.com>
Source record: 182405
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

I want some of what you are smokin'!!

Arrow146 wrote:

> A lot of nice posts about Antennas.
>
> No bickering, no personal attacks, no threats of law suits.
>
> Am I on the right news group or did Chips computer blow up ?
>
> 73 Al Lowe N0IMW

[One or more binary attachments are retained only in the source text.]

433. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <%0kn5.1958$tM.214620@dfiatx1-snr1.gtei.net>
Source record: 182406

"Jim Weir" <jim@rst-engr.com> wrote in message
news:askqpsgghidegb94ls90j1c69plc1kr97o@4ax.com...
> Terry Sanford <tsanford@roadrunner.nf.net>
> shared these priceless pearls of wisdom:
>
> -
> ->Reason I ask is that I was thinking about using 'N' type at base of my
> sailboat
> ->mast for marine VHF (max 25 watts) because it looked a lot more
waterproof
> than
> ->the PL-259/SO-239 type.
>
> N is way, way overkill. BNC is smaller, lighter, a hell of a lot easier
to put
> together, and comes in the right size for RG-58 cable, which is probably
what
> you will want to use at 150 MHz. and 25 watts.

RG-58 has about 5 db loss per 100 foot at 150 mhz. Even a 50 foot run will result in a loss of about half of the power fed into it, as well as half of the received signal strength. I would think that a 25 watt marine radio on the open waters would opt for max range and reliability, therefore he would probably want to use an LMR-400 or 9913 type cable to keep feedline losses at a minimum. If so, a UHF or type N connector would be appropriate.

>
> If you want it REALLY, REALLY waterproof, squeeze some silicone seal onto
the
> connector, then shrink sleeve over that. Make sure that you shrink it
from the
> center out to the edges and that some silicone "bleeds" out the end of the
> sleeving where it goes over the coax. It will take a knife and an
afternoon to
> ever get it apart again, but it is guaranteed waterproof for life.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

73 de W6DKN

434. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399DCE5D.71789232@cac.net>
Source record: 182407

w4hij@my-deja.com wrote:

> Recently I set out to build a "rotatable dipole" for 20 meters. It
> seemed the best way to get coverage in all directions as well as
> realize a slight amount of gain and some directivity. The first problem
> was that I did not have the turning radius for a full size antenna so I
> used a program I got off the web somewhere (lost the url)
> called "reducer" which gave me the data I needed to reduce the antenna
> length by using loading coils. The antenna is about 60% in size, right
> at about 20 feet long and the coils are 1 and a half inches in diameter
> with 22 and a half turns each for a load inductance of 6.59 uh. All of
> this is per the calculations of the reduction program. The problem is
> the antenna will not match! I cannot get any reasonable SWR reading or
> the thing to take any power at all. No amount of pruning or lengthening
> accomplishes anything. I have always been able to get dipoles to take
> power before just by simple pruning. I am not a novice at building
> antennas but this is my first experience with loading coils. Am I
> missing something? Perhaps I need some type of matching circuit at the
> feedpoint...the reducer did not specify this though. Any of you antenna
> whiz kids out there got any ideas? I am completetely frustrated. By the
> way I did check the coax for shorts and open conductors so that is
> ruled out.
> Thanks for any help...
> 73, Michael W4HIJ
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Just a guess here, but it's worked for me on a mobile. You might try moving the loading coils to the ends of the dipole instead of the center. At least that way the coils won't interfere with each other as much. you might even be able to match it up.

HTH.

-SSB

435. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Steve <amradio@thebizlink.com.removethis>
Message-ID: <amradio-548CF1.20293218082000@news.erols.com>
Source record: 182408

In article <20000818192907.24028.00000044@ng-cb1.aol.com>,
arrow146@aol.com (Arrow146) wrote:

> >Insulters can order a copy for $3.00 from the Patent and Trademark
> >Office, http://uspto.gov.
> >
> >Roy Lewallen, W7EL
> >
> >Bill Aycock wrote:
> >>
> >> Al- You are SO right- nice!
> >>
> >> His computer is still functioning- there is a mini love fest going on
> >on
> >> the private list, interspersed with notice that he cant talk about the
> >> two more patents he expects out soon.
> >>
> >> He has also offered to make copies of THE PATENT for anyone who sends
> >in
> >> a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
> >> qualify. Guess I'm out.
> >>
> >> He will be busy till after Labor day, so copies will be delayed.
> >>
> >> Bill- W4BSG
> >
> >
> Shhh, Lets all be real quite, maybe we won't wake him.
> The last thing I want to know, is anything about his patents.
>
> I have some antenna questions I would like to ask the news group,
> but I need to do more research first. This would sure be a good time to
> ask.
> Oh well.
>
> 73 Al Lowe N0IMW
>

If so, why are you wasting time and bandwidth talking about him?

436. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399DBCB5.57DE@pacbell.net>
Source record: 182409

Arrow146 wrote:
>
> A lot of nice posts about Antennas.
>
> No bickering, no personal attacks, no threats of law suits.
>
> Am I on the right news group or did Chips computer blow up ?
>
> 73 Al Lowe N0IMW

He'll be back. Actually, I don't mind him so much, because, as long
as he's around, I'm not the worst poster on the newsgroup.

Tom Donaly KA6RUH

437. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399DC1BE.4631@pacbell.net>
Source record: 182410

Bart Rowlett wrote:
>
> Hi Tom,
>

>
> The basic operation of the system is achieved if the phase inverter is
> considered to be a center tapped autotransformer. The center tap is
> grounded and the other two ends connected in the radiating elements.
> The rub is that the magnetizing impedance of the transformer needs to be
> 10,000 ohms or greater. Virtually impossible at MF and HF without
> resorting to some sort of resonant circuit like a tank or stub.
>
> Choice of the L/C ratio, or differential mode characteristic impedance
> of the transmission line stub, results from carefully trading off
> several performance parameters such as system bandwidth, broadside gain
> and sensitivity to geometric and environmental changes. As far as I
> know, optimized systems always turn out to be overcoupled and exhibit
> multiple resonances _outside_ of the useful system bandwidth. Remember,
> every 'hump' in the system response is associated with a phase shift of
> up to 180 degrees. For the collinear to be successful, the phase
> relationships need to be maintained within 60 degrees or less.
> Therefore, the useful bandwidth for collinear operation will be less
> than the bandwidth of any single resonance peak.
>
(snip, snip)

> Unfortunatly, the Bazooka
> doesn't really work as intended in practical amateur implementations for
> 75/80 m where broadbanding is most needed. The technique is integral to
> the broadbanding schemes used in many modern systems of high complexity
> such as multiband curtain arrays.
>
> bart
> wb6hqk

Hi Bart,
this is the information I was looking for, thank you. It will
cause much thought and experimentation. Do you have a reference for
the broadbanding schemes mentioned above?

Tom Donaly KA6RUH

438. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399DDA79.FC3DD82E@oio.net>
Source record: 182411

Andrew,
Horizontal loops do work. They have draw-backs like any antenna does, but they do work well. One of the "pro's" is that they seem slightly 'quieter' than a random wire, or dipole antenna. The 'flip-side' of this is that the signal strength of all signals is 'down' from other type antennas. This also means that the signal to noise ratio is better. So, it's a trade-off. (I'm keeping my loop, by the way)
It would be nice if all suspension points used insulators, but, insulators are not really necessary even if the wire isn't insulated. You will get some reactance from not using insulators, but depending on how you feed the loop, those can be 'taken care of'. Not using insulators also means that you will eventually 'rub' the wire in two. Guess that depends on the wind and weather in your area.
If you've got the choice, go for altitude! Inclose the largest area inside the loop as possible, the more the better. That means that a circle shaped loop is 'best', a triangular shaped one is almost the 'worst'. A very long, narrow loop IS the 'worst' shape (folded dipole).
As long as your only receiving with it, I'd feed it with ladder-line and forget about the mismatch. One trick, if you do it that way, is that you can turn the loop into a 'long wire' by disconnecting the ground 'side' from the receiver. That changes reception for the 'better' some times (and sometimes not). When you get HF privileges, and if you want to use the loop for transmitting, feed it through a balanced tuner. Depending on the tuner. you can use it almost any-where, even two meters.
'Doc

439. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399DDBDA.A7366EC5@oio.net>
Source record: 182412

Michael,
The other posts have good ideas so I'd try them. I just
wanted to point out that while you will get some directivity
from using a rotatable dipole you will get no gain. in fact,
with the 'shortened' rotatable dipole, you'll probably loose
a bit. That's not necessarily bad, 'cuz you do get some
advantage by turning it.
'Doc

440. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <399DDF82.C00C75ED@uci.edu>
Source record: 182413

Fractenna wrote:
>
> I want to make it clear that efforts to maliciously libel me and my corporate
> firm have recently produced a query from a major telecom company, in which one
> of their chief engineers stated he will not have anything to do with the
> technology--based on these comments.

I wonder if he was just too nice to say that his decision was actually
based on his reaction to the nature of your comments. Something to
think about anyway.

73 de ac6xg

441. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Russ Sherry <rsherry@metricom.com>
Message-ID: <399DE380.16EDC434@metricom.com>
Source record: 182414

Hi Andrew,
I use a 40 meter full wave horizontal loop at 20 feet. The antenna is fed with 450 ohm transmitting style twin lead through a Johnson KW Matchbox. The antenna is very effective. With 200 watts on SSB on 40 in six months I worked WAC. This was going through the sun spot minimum. The antenna picks up less noise than a dipole at the same location. I use the antenna on all bands except 160 meters.

I use UV proof rope at the four corners as insulators in a flag pole style pulley system. Use the insulated wire and you can pull the wire through trees with very little degradation. My supports at the four corners are TV antenna support masts (two at each corner). I recomment the use of the twin lead feed with at minimum an antenna tuner that uses a balun to balance the tuner output. I do not recommend the use of coax cable to feed the antenna for transmitting. Coax could be used for receiving. Use with an antenna tuner and balun for best results.

Disconnect the antenna from the receiver and ground it unless you are using the antenna. This will help to reduce the possibility of lightning damage to the radio equipment. The loop should cover as large an area as practical and it is not necessary to have a square antenna set up. I feed my antenna 1/2 way down one side. I have no interference to any electronic equipment in the house even at the 1200 watt level. The antenna is 15 feet from the house and telephone system.

I infrequently serve as net control for the West Coast swap net using this antenna and am told it is very effective.

Good luck in getting on HF. It can be very enjoyable.

Russ, NM6DX

Set'em up Joe wrote:

> Greetings,
>
> The 2000 ed. of The A.R.R.L. Hndbk. lists a project to
> throw up a 1 wavelength horizontal loop they call, " The Loop
> Skywire." It's cheap, I've got the wire (500ft. roll of 14AWG ins.),
> and the trees to throw up it up as a lop-sided horizontal Quad, in
> effect. So ,okay go for it.
>
> What I'd like is feedback on a couple of questions. First
> is insulators. I can scavenge two egg-types but getting more
> means basically a 2 hr. expedition and more money. They're not
> a Home Depot / RS item unless I but another RS SW Ant. Kit.

> Since the wire is insulated, how important are they?? Just to
> counteract line tension by swaying trees?? Maybe I'd rather just
> take my chances if that's true.
>
> Secondly, this loop certainly gets a glowing review from
> the Hndbk. Do you agree with it? Experience with it? To compare,
> currently I'm using a 66ft. random wire 20ft up and I'm using it for
> my reciever (RS DX-392). So this loop is for RX only. Not sure
> how much higher I can get with the loop (especially if I have to
> climb up and tie off insulators). Which is another issue: Even if
> insulators are worth it, would it be better to go for max. alttitude
> of the circuit and just forgo the insulators? I have at least two
> possible "routes" to use; the first is a shade over 40M wavelength,
> the 2nd a shade over 80M wavelength. I wanted to go with the
> 80M for broader band coverage. I'm a newly licensed ham and
> don't have more than Tech. privs. right now so this is just to make
> for some better DX'ing on my reciever. Seems easy and cheap,
> what do you think?
>
> THX,
>
> Andrew
> KG4JBM

442. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399DEBFE.438864F6@cac.net>
Source record: 182415

Fractenna wrote:

> I want to make it clear that efforts to maliciously libel me and my corporate
> firm have recently produced a query from a major telecom company, in which one
> of their chief engineers stated he will not have anything to do with the
> technology--based on these comments.
>
> I will state clearly and emphatically that this is compelling evidence for
> libel and likely lost income based on such NG posts.
>
> The situation is very serious, and in my opinion, at this point deserves media
> attention on how the internet is being used to kill companies.
>
> I would like to remind those who libel that ATT had one such person in Houston
> put in jail a few months ago for such manipulation. The precedent is there.
>
> Nathan Cohen, Ph.D.

Oh, my god... You guys couldn't leave it well enough alone... you had to wake it up.

::sigh::

-SSB

443. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <399DF27A.8AFBB74F@fgi.net>
Source record: 182416

Your right, it could be worse.
I got placed into the "kill" file which means I am the
only one who can read this post depending on how
wide the Kill file spread is.
Like sending E mail to your self.
Even Chip didn,t get into the 'kill' file
so you have to be really bad and obnoxious
Art Unwin
KB9MZ
Have a question tho, if a dipole wire passes thru a floating
ungrounded conductive tube what effect does it have on radiation
or the feed impedance?
Ooops that went into the "kill" file

Donaly wrote:

> Arrow146 wrote:
> >
> > A lot of nice posts about Antennas.
> >
> > No bickering, no personal attacks, no threats of law suits.
> >
> > Am I on the right news group or did Chips computer blow up ?
> >
> > 73 Al Lowe N0IMW
>
> He'll be back. Actually, I don't mind him so much, because, as long
> as he's around, I'm not the worst poster on the newsgroup.
>
> Tom Donaly KA6RUH

444. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399DF16E.EB91EFA9@cac.net>
Source record: 182417

Arthur Unwin wrote:

> Your right, it could be worse.
> I got placed into the "kill" file which means I am the
> only one who can read this post depending on how
> wide the Kill file spread is.
> Like sending E mail to your self.
> Even Chip didn,t get into the 'kill' file
> so you have to be really bad and obnoxious
> Art Unwin
> KB9MZ
> Have a question tho, if a dipole wire passes thru a floating
> ungrounded conductive tube what effect does it have on radiation
> or the feed impedance?
> Ooops that went into the "kill" file
>
> Donaly wrote:
>
> > Arrow146 wrote:
> > >
> > > A lot of nice posts about Antennas.
> > >
> > > No bickering, no personal attacks, no threats of law suits.
> > >
> > > Am I on the right news group or did Chips computer blow up ?
> > >
> > > 73 Al Lowe N0IMW
> >
> > He'll be back. Actually, I don't mind him so much, because, as long
> > as he's around, I'm not the worst poster on the newsgroup.
> >
> > Tom Donaly KA6RUH

Um, Art... A killfile is done on the receive end, kindof like squelch. You might be in someone's killfile, but that doesn't mean you can't post.

-SSB

445. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399E093B.55DB3573@hiwaay.net>
Source record: 182418

Roger, et al-
Do you really mean "Acetone" (dimethyl Ketone) or do you mean "Acetic acid" (smells like vinegar)?
There is a world of difference, and it IS important.
Acetone is a solvent, used in lacquer and various paints, and in Nail polish remover. Sometimes used to thin Epoxy.
Acetic acid is one of the common acids. At 5% solution, it is sold as vinegar- in The common Silicone caulks, it is released by reaction with atmospheric moisture, to initiate the curing process.

Bill-W4BSG

Roger Halstead wrote:
>
> I thought I'd put this into a thread by itself.
>
> From time to time some one will mention the use of Silastic RTV @, or other
> brands of silicon sealant for use in amateur Radio.
>
> Much of it works great and there are other materials out there that work
> well too.
>
> I'd assume that the acrylics work well too, if given a chance to fully cure
> before being put out into the elements.
>
> A major word of caution though.
> Any of the RTVs that smell like Acetone do so because you really are
> smelling Acetone.
>
> In confined places with prolonged contact, Acetone is corosive to copper,
> aluminum, and solder.
>
> There are a number of RTVs that do not use acetone, but rather alcohol and
> possibly other agents. In general they use the moisture in the air to aid
> curing as do those that smell like Acetone.
>
> I've heard salesmen get really excited and claim that "their brand" is not
> corrosive, but if it smells like Acetone... and theirs did!
>
> As I mentioned in another post, one company ended up with a very large
> expense because they were using an RTV (that smelled like Acetone) to pot
> some transducers and printed circuits in some cast Aluminum boxes.
>
> A year later the circuits started failing and dismanteling showed that the
> wires, printed circuits, and solder joints were just crumbling away to be

> left by a white (or green) powder.
>
> I "prefer" to use DC-4 compound *in* connectors. It's a dielectric grease
> that was developed in WWII to fill the spark plug connectors in B-17s and
> other aircraft to keep them from arcing at high altitude.
>
> The stuff is clear, but *messy* and expensive. Some antennas come with a
> tiny capsule of it and no, I'm not talking about Pentrox. It does form a
> film that stays and prevents oxidation.
>
> I also use the Marine "Liquid Electrical Tape" which works great. Doesn't
> last long after the can has been opened, but works great. I usually run
> out, before it drys out any way. <:-)) It's not very expensive either.
>
> When using DC-4, I typically fill the connector with DC-4, make the
> connection which squeezes grease all over. I try to keep the grease from
> covering the outer surface of the connector. Then clean up and give the
> connector at least three coats of the liquid electrical tape. Allow plenty
> of dry time between coats.
> No, I've never noted a problem with an impedance bump using the grease in
> the connectors and I checked a few with a time domain reflectometer.
> You do have to give the connectors a thorough cleaning after the grease
> though or absolutely nothing will stick. <:-))
>
> For most work, I just use the liquid electrical tape. On UHF connectors you
> want to make certain that the entire connector is covered after assembly.
> Water can get in either end.
>
> When using 9913 or similar cables I use the grease as water in one end will
> run right on out the other and the normal connectors only slow it down a
> little.
>
> There is a stain on my operating desk right at the back of my two meter
> rig from where the water was dripping on the desk.
> I hadn't filled the connectors and a lightening hit took the tape off the
> outside of the connectors up on top. That leak cost me nearly 200 feet of
> 9913.
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2

446. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Les Nagy <lnagy@mountaincable.net>
Message-ID: <OZ4n5.85$516.15921221@news1.mountaincable.net>
Source record: 182515
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:8ni6p9aeb7@bashir.peak.org...
> In rec.radio.cb Les Nagy <lnagy@mountaincable.net> wrote:
>
> : I am assuming that you know how to use an SWR meter. If you do not, then
> : read up. Starting at the bottom frequency of interest and working up the
> : highest frequency of interest, make note of each SWR reading. If the SWR
> : minimum is not within your band, then you will probably need to trim. If
the
> : SWR keeps falling as you go up in frequency them go outside, shorten
both
> : ends by an inch and retest. If the SWR starts lower and keeps rising,
then
> : lengthen each end and retest. Hopefully there is enough extra wires in
the
> : eyes to do this. Once a test run show the SWR reaching a minimum in the
band
> : the next step is easier.
>
> You have this backwards. If the SWR goes lower as you go higher in
> frequency, then the length is too short. It is a common mistake, even
> for people who really know what they are doing.

You are completely correct Bill. I do get it reversed from time to time.
Thank you for catching me on this. Another way to look at this is to move
the minimum SWR up in frequency, shorten. To move the minimum SWR down,
lengthen.

Les Nagy mailto:info@atsi.on.ca
Aldebaran Technological Services Inc.
Phone: 905-388-1011
Fax : 905-388-9028
http://www.atsi.on.ca

447. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: Les Nagy <lnagy@mountaincable.net>
Message-ID: <M15n5.87$h66.16175191@news1.mountaincable.net>
Source record: 182516
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:8ni6p9aeb7@bashir.peak.org...
> In rec.radio.cb Les Nagy <lnagy@mountaincable.net> wrote:
>
> : I am assuming that you know how to use an SWR meter. If you do not, then
> : read up. Starting at the bottom frequency of interest and working up the
> : highest frequency of interest, make note of each SWR reading. If the SWR
> : minimum is not within your band, then you will probably need to trim. If
the
> : SWR keeps falling as you go up in frequency them go outside, shorten
both
> : ends by an inch and retest. If the SWR starts lower and keeps rising,
then
> : lengthen each end and retest. Hopefully there is enough extra wires in
the
> : eyes to do this. Once a test run show the SWR reaching a minimum in the
band
> : the next step is easier.
>
> You have this backwards. If the SWR goes lower as you go higher in
> frequency, then the length is too short. It is a common mistake, even
> for people who really know what they are doing.

You are completely correct Bill. I do get it reversed from time to time.
Thank you for catching me on this. Another way to look at this is to move
the minimum SWR up in frequency, shorten. To move the minimum SWR down,
lengthen.

Les Nagy

448. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399cfd60.452812@news.akorn.net>
Source record: 182517

>Amphenol rates their type-N at 1500 Volts, peak, and their type-UHF at
>500 Volts, peak.
>No mention of power handling in the catalog.
>Regards, Jim

Hi Jim,

I have no idea where or how those ratings were derived, but a
PL259/SO239 combo will handle a large amount more voltage and current
compared to a N. The N is dimensionally almost identical to a BNC as
far as conductor size and air gap in the connector.

I typically highpot all my jumpers before installing them, and just
last week highpotted a harness with N's and UHF fittings at opposite
ends. The N's were the voltage limiting connector, arcing between the
pin and the ground around the pin.

If you take the bayonet off a BNC male, it makes a dandy N-type quick
connect for the test bench.

On Thu, 17 Aug 2000 12:36:48 -0400, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

>> By far the biggest worry is some connectors, like those from Radio
>> Shack, overheat at high power levels (over 1000 watts) during extended
>> transmissions.
>
>The ones I see at my local Rat-Shack are made by Amphenol, and use Teflon
>dielectric. These are a problem at high power levels?

The ones I am thinking of have a brownish plastic dielectric. They
swell up and stink at 1500 watts or less on RTTY or extended time on
CW.

>I remember a thread, on this NG, some months back about how much power a "N"
>connector can handle. I don't recall anyone ever finding a spec for a given
>manufacture's connector.

Into matched loads at HF, you'd be amazed at what cable and connector
can take what power. But any N has always been the weak link in my
systems. I take N females on my 7/8 Heliax and bore out the center and
shorten it. I add a center pin from a SO-239 with polyethelyne tubing
or PTFE tubing over the pin as an insulating sleeve. That gets rid of
the weak spots in case I accidentally hit the wrong antenna on the
wrong band at full power.

If I leave an N in line, it becomes toast. Generally on the furthest, highest, hardest to reach connector in the middle of the rainy night during a contest.

73 Tom

449. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399d01b6.1563248@news.akorn.net>
Source record: 182518
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Thu, 17 Aug 2000 07:11:00 -0700, Donaly <dtdonaly@pacbell.net>
wrote:

>You're a radio engineer, Tom. What would you do to make an
>accurate S meter, or even and S meter accurate?

The first thing I'd do Tom is re-mark the scales on the meters, so the
scale was divided so that 6dB with a given current change in the meter
above S-9 was the same as an S unit below S-9.

Then I'd build a separate receiver for the S meter using a log amp of
some form with a step attenuator, and keep it out of the AGC loop.

Hmmm. Sound's like too much work to have the S meter. I'd buy a W-J
commercial receiver, make sure it was correct, and give dB reports
over my noise floor.

As was pointed out, S-9 on my antennas might be 10 dB or more
different than S-9 down the road. So who cares?

73 Tom

450. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 01:54:46 UTC
From: Tom Branch <t.branch@gte.net>
Message-ID: <GH0n5.727$vJ1.211616@paloalto-snr1.gtei.net>
Source record: 182508

Jack,

I can add a few comments to those already posted. When I began my search for a home here in Dallas, I found a realtor who was also a ham. He was very aware of what I was looking for. Once I found a property I was interested in, his friends at the title company would get us copies of the deed restrictions. Another local ham is a lawyer and reviewed the documents as well as the city zoning at no cost! I also spend some time at the city planning office talking to the zoning people and building inspectors. Before I closed I was able to get the documents together for a permit and get it to the city.

While I chose not to have a contract that was contingent on getting a permit from the city, that is an option to discuss with your agent. Always do the research yourself and have the documents reviewed by an lawyer.

I wound up with a nice older home (1978--still some restrictions, but none related to towers and antennas...mostly size and design) and a permit for a 60 foot tower with a 2 element 40 meter beam and a triband yagi.

GL es 73 de Tom, K4NR

jack albert wrote in message ...
>Trying to purchase a new house without Antenna restrictions or covenants is
>really difficult and
>I'm a little bit confused on the FCC policies concerning the private
>contractual agreements.

451. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 02:24:41 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8ni6p9aeb7@bashir.peak.org>
Source record: 182509
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

In rec.radio.cb Les Nagy <lnagy@mountaincable.net> wrote:

: I am assuming that you know how to use an SWR meter. If you do not, then
: read up. Starting at the bottom frequency of interest and working up the
: highest frequency of interest, make note of each SWR reading. If the SWR
: minimum is not within your band, then you will probably need to trim. If the
: SWR keeps falling as you go up in frequency them go outside, shorten both
: ends by an inch and retest. If the SWR starts lower and keeps rising, then
: lengthen each end and retest. Hopefully there is enough extra wires in the
: eyes to do this. Once a test run show the SWR reaching a minimum in the band
: the next step is easier.

You have this backwards. If the SWR goes lower as you go higher in
frequency, then the length is too short. It is a common mistake, even
for people who really know what they are doing.

--
Bill Nelson (billn@peak.org)

452. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 02:53:51 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399CA5A7.E53F14DC@bellatlantic.net>
Source record: 182510
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Well, it seems to me that it doesn't matter in any
event. My S meter reading is only relevant to
comparisons I make at my station. You could
be putting a tremendous signal into my area.
A ham 1 mile away might see your signal at
S 9 +40 if he borrowed my rig. Then drag
my rig back to my station and the signal might
be S6. Same S meter, same source, but 2
different locations with two different antennas.
So whether my S meter is calibrated or not
does not seem all that important. But I would
like the delta to represent some precise figure.
It would be helpful to know exectly how
many db's difference there was between
antennas, or for F/B or F/side measurements.
Actually, I'd like that in digital readout.

And I'm surprised that both you and Tom
don't get 6db per s unit - so much so that
I intend to repeat my test. I trust you guys
enough where it makes me suspect my own
measurements.

Roy Lewallen wrote:

> That makes a total of two rigs I know of which have 6 dB per S-Unit.
> Someone else reported the Kachina to have S-Units of this size. All
> other rigs I've measured, and which I've gotten reports on, have had
> S-units of a maximum of 5 dB (typical for some Kenwoods), and somewhat
> less to much less for other rigs like my Icom. The S meter typically
> indicates the AGC voltage, which is a more-or-less logarithmic function
> of the signal strength. A lot of rigs are set up for 50 microvolts for
> S-9, but that's a simple, one-point adjustment, and has nothing to do
> with the scale sensitivity and linearity. Reg's rig is the only one I've
> heard of which actually has an adjustment for the S meter sensitivity,
> and I have no idea how it's made to be constant over the scale.
> Unfortunately, Reg has apparently never actually measured his to
> ascertain whether it's adjusted correctly, or whether it's linear. (Or
> at least, he's never shared his measurement results with us.) There also
> seems to be something regional about this -- apparently only the
> Japanese rigs shipped to the U.K. have this adjustment, but not the ones
> sent to the U.S. Or maybe only the U.K. ones are adjusted properly --
> this isn't entirely clear to me. It is clear, though, that meters which
> have never been measured are always perfectly accurate.

>
> Thanks for the posting -- I'll add yours to the short list of rigs which
> actually have a 6 dB per S unit meter. You, and the Kachina users, can
> interpret the S unit as used by most popular writers to the marks on
> your meter scale. The rest of us can be seriously in error if we do
> that.
>
> Roy Lewallen, W7EL
>
> ehsjr@bellatlantic.net wrote:
> >
> > Roy,
> >
> > Well, I've measured my S meter's accuracy, and it is
> > exaqctly as Reg described. This was on a cheap
> > Uniden - the "President" model which also goes
> > by model number 2510. It is a 10 meter all mode
> > radio, used as the IF for a 6 meter transverter.
> > I measured it because the transverter seemed to
> > hear very poorly. Any way, it was exactly on,
> > yet the setup was still deaf. I got to questioning the
> > accuracy of my signal generator - an HP 608 D.
> > So I brought the setup to a friends house, and he
> > measured it with his test equipment - it was spot on.
> > But there was a major difference - when we hooked
> > the transverter to his antenna, all of a sudden I could
> > hear 6 meter signals. 6 antennas later, I'm still
> > fairly deaf at my qth - but the rig works.
> >
> > My guess is that most new radios are fairly accurate -
> > when the s-meter shows S-9 you've got close to
> > 100 microvolts. I expect accuracy drops off the farther
> > away from S-9 you get. My Uniden was pretty good
> > down to S 3 or S 4 - I don't remember which.
> > When I get a few projects out of the way, I'll drag
> > my 746 over to the generator and see how accurate
> > it's " s-meter " is. (Not a meter at all - a horizontal
> > bar graph on the LCD display). The same ham who
> > performed the second test on my Uniden - he also
> > uses an HP 608 D - tested his 756 and found it was
> > slightly off in the wattmeter. I do not remember whether
> > he tested the S meter, but my bet is he did. He is quite
> > meticulous about those things. If he did test it, he would
> > surely have told me if the S-meter was off. I'll have to ask
> > him. Or, if you work him, you can ask him yourself.
> > His call is WA2WEJ
> >
> > Roy Lewallen wrote:
> >
> > > Ah, Reg, you never disappoint me. Theory is always so much tidier when

> > > not sullied by those annoying measurements. As long as we never actually
> > > measure our S-meters, we can remain steadfast in our certainty of their
> > > precision. Exept for American S-meters, of course.
> > >
> > > Roy Lewallen, W7EL

453. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 03:33:17 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399CAED4.B126DCF0@bellatlantic.net>
Source record: 182511
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

In context, your statement is correct, no problem.
But, if taken out of context, (and this "wrong way
pruning" is so often a problem that that is likely)
your statement is both wrong and right. The
problem is that it does not include a reference
to the design frequency.

There's a neat "graphical" technique to eliminate the
confusion.

Take an 8 1/2 by 11 piece of note paper.
Draw a smile on it, the full width of the paper.
Label the left end of the smile with two
labels: "lower frequency" and "longer".
Label the right end of the smile with
"higher frequency" and "shorter"
Lable the center of the smile with
"lowest SWR" and "design frequency".
Then take 3 swr readings - one below,
one at, and one above the design frequency.
If they are increasing in value, they correspond
to the slope of the smile from the center toward
the right side. That tells you your antenna is
shorter than it should be. If the readings are
decreasing in value, they correspond to the
slope of the smile from the left hand toward
the center. That tells you your antenna is longer
than it should be. And if the lower frequency
swr reading and the higher frequency swr reading
are both higher than the swr reading at the design
frequency, the antenna length is just about right.
At that point, you need to narrow down the
range of frequency excursion from the design
frequency, to ensure that it - the design frequency
swr reading, is at a minimum.

Bill Nelson wrote:

> In rec.radio.cb Les Nagy <lnagy@mountaincable.net> wrote:
>
> : I am assuming that you know how to use an SWR meter. If you do not, then
> : read up. Starting at the bottom frequency of interest and working up the
> : highest frequency of interest, make note of each SWR reading. If the SWR
> : minimum is not within your band, then you will probably need to trim. If the

> : SWR keeps falling as you go up in frequency them go outside, shorten both
> : ends by an inch and retest. If the SWR starts lower and keeps rising, then
> : lengthen each end and retest. Hopefully there is enough extra wires in the
> : eyes to do this. Once a test run show the SWR reaching a minimum in the band
> : the next step is easier.
>
> You have this backwards. If the SWR goes lower as you go higher in
> frequency, then the length is too short. It is a common mistake, even
> for people who really know what they are doing.
>
> --
> Bill Nelson (billn@peak.org)

454. Re: YAGI SPACING??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 03:44:34 UTC
From: ehsjr@bellatlantic.net
Message-ID: <399CB179.8EF7F0B1@bellatlantic.net>
Source record: 182512

"Ian White, G3SEK" wrote:

>
> No, but that and more information is on the web pages you've already
> seen.

Absolutely. There's great stuff about stacking when you click
on "more information and follow ups" next to the VHF/UHF
book. I found everything I swa on your site "delicious"!
Thanks!!

>
>
> Eventually RSGB will get all the old 'In Practice' columns online, and
> as they do, I'll provide links from my site.
>
> >"Ian White, G3SEK" wrote:
> >
> >> KC8LVJ wrote:
> >> >I am looking to install a 6 Meter Yagi above a Mosley triband Yagi.
> >> >the 6 Meter has a 6 foot beam. tower is 48 ft tall.
> >> >Question: what should be minimum spacing between the two to avoid
> >> >conflict?????
> >>
> >> At least half the spacing that the manufacturers of the 6m yagi
> >> recommend for stacking two of those yagis. For the reasons why, see my
> >> web site.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

455. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 03:51:55 UTC
From: n8blk@aol.com
Message-ID: <20000817235155.28140.00000013@nso-fp.aol.com>
Source record: 182513

In article <399C6FAD.789B3DF@eznec.com>, Roy Lewallen <w7el@eznec.com> writes:

>It's always seemed to me a good investment to spend a few hundred
>dollars for a lawyer before I sign away a couple of hundred thousand on
>the dotted line. But most people don't seem to see it that way. I also
>found it to be very worthwhile to spend a day or so at the courthouse
>looking at the public documents relating to the property in question.
>Seemed like a small price to pay for added assurance I wasn't going to
>be making a bad mistake when I agreed to pay all that money.
>

One of the inherent problems of looking at deeds is that often the deed is part of a parcel, which part of a section, and the section contains the restrictions in question even if there is no HOA. Usually you need someone really experienced with real estate to find the snake in the grass for CC&Rs, and as you state, that can cost money. However it should be noted that few people with competent lawyers buy real estate with flaws, but most CC&Rs don't cause problems for most folks. Hams probably are better off looking in older communities and SOME big cities or places outside any builder's plans i.e. you buy the land, and it's undeveloped then you hire the builder or some place built like that. Most places however are now the result of developments, and the best we can hope for is pre-emption either by the FCC or state legislatures (lots of luck, builders have well paid folks to lobby for them).
-art clemons-

456. FS: EIMAC 8877 NEW TUBE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 06:00:29 UTC
From: radioeg@aol.com
Message-ID: <20000818020029.06292.00000137@ng-fx1.aol.com>
Source record: 182514

NEW IN UN OPEN BOX FOR $450.00 PLUS SHIPPING FROM LOS ANGELES ED K6EG

457. Opinions on the R8 Vert.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 21:34:38 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <399dab23$0$783$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182325

ant opinions and feedback of the C/Craft R8
rgds Dennis

458. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-18 22:33:27 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <399dd6c6$0$772$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182331

Excellent explanation Roy.
rgds Dennis.
Roy Lewallen <w7el@eznec.com> wrote in message
news:399DB3A9.51578BC6@eznec.com...
> This antenna will be quite narrowbanded, so you'll have to get the
> loading inductance pretty close to see any resonance within the band.
> The amount of inductance depends strongly on the dipole's diameter, and
> much less on the antenna's height. According to EZNEC, you need about 5
> uH total, or about 2.5 uH per side for a 1" diameter antenna, and 7.8 uH
> total for a dipole made from #12 wire. When resonant, the feedpoint
> impedance should be about 23 ohms plus coil loss for either diameter, so
> you should see about 2:1 SWR when you get the loading right. If you want
> better than that, you'll have to use some sort of matching arrangement,
> but most rigs won't complain about 2:1. If you don't have an antenna
> analyzer, dip meter, noise bridge, or other way to find resonance, I'd
> temporarily add some inductance, then tap down on the coils until you
> find resonance, then make a more permanent connection after you know
> about the right coil size. The antenna will be more narrowbanded than a
> full size dipole, but otherwise just as good for all practical purposes
> (if you can keep the coils clean and dry).
>
> Roy Lewallen, W7EL
>
> w4hij@my-deja.com wrote:
> >
> > Recently I set out to build a "rotatable dipole" for 20 meters. It
> > seemed the best way to get coverage in all directions as well as
> > realize a slight amount of gain and some directivity. The first problem
> > was that I did not have the turning radius for a full size antenna so I
> > used a program I got off the web somewhere (lost the url)
> > called "reducer" which gave me the data I needed to reduce the antenna
> > length by using loading coils. The antenna is about 60% in size, right
> > at about 20 feet long and the coils are 1 and a half inches in diameter
> > with 22 and a half turns each for a load inductance of 6.59 uh. All of
> > this is per the calculations of the reduction program. The problem is
> > the antenna will not match! I cannot get any reasonable SWR reading or
> > the thing to take any power at all. No amount of pruning or lengthening
> > accomplishes anything. I have always been able to get dipoles to take
> > power before just by simple pruning. I am not a novice at building
> > antennas but this is my first experience with loading coils. Am I
> > missing something? Perhaps I need some type of matching circuit at the
> > feedpoint...the reducer did not specify this though. Any of you antenna
> > whiz kids out there got any ideas? I am completetely frustrated. By the
> > way I did check the coax for shorts and open conductors so that is

> > ruled out.
> > Thanks for any help...
> > 73, Michael W4HIJ
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.

459. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819135809.11263.00000323@ng-fa1.aol.com>
Source record: 182219

interesting numbers there

>"Tom W8JI" <2w8ji@contesting.com> wrote in message
>news:399b95ec.703193@news.akorn.net...
>>
>> N connectors, below about 400 MHz, are a waste unless you have a whole
>> bunch of connectors in the line or are doing precision measurements.
>
>As I have found out that all "depends" on two factors. The first is the type
>of dielectric material used, and second the length of the connector. I did a
>simple purely mathematical study of a 1 inch long SO-239 barrel connector,
>with a PL-259 plug on each end, for an overall length of 1.25 inches, as a
>test case. I have always heard the rule of thumb not to use UHF connectors
>above the 2 meter band, and I wanted to find out why they are so "bad".
>
>The data below was calculated based on the formulas I looked up to calculate
>the Z of a coaxial conductor system, and the loss less transmission line
>equation. All the calculations assume a pure load Z of 50 ohms connected to
>one end of the barrel connector. The barrel connector, and plugs, are
>treated as a transmission line with the length corrected for the frequency
>used.
>
>For a Teflon dielectric with a dielectric constant of 2.1 I get:
>
>Zconnector=34.5 ohms
>
>440 MHz; SWR=1.365
>146 MHz; SWR=1.112
>52 MHz; SWR=1.039
>29 MHz; SWR=1.021
>
>For the cheap Penolic dielectric with a dielectric constant of 4 I get:
>
>Zconnector=25 ohms
>
>440 MHz; SWR=2.241
>146 MHz; SWR=1.335
>52 MHz; SWR=1.109
>29 MHz; SWR=1.06
>
>And for the record with an Air dielectric constant of 4 I get:
>
>Zconnector=50 ohms (Hum, very interesting!)
>

>This would strongly suggest a UHF connector using mostly air should work
>almost as well as a "constant Z" connector design. This would explain the
>rib structure used to hold the center conductor in place on the high quality
>SO-239 antenna mounts I have looked at, and the connectors on the back of
>some V/UHF SWR-Watt meters too.
>
>As you can see either dielectric type will give acceptable results on the 2
>meter band, and below, with a perfect 50 ohm load. However on the 70 cm
>band, unless you have a load close to 50 ohms, even the Teflon dielectric
>may not work well, while the Penolic dielectric material is out of the
>question. Both types of dielectric material appear to be OK for use on the 6
>meter band and below. Remember that the above results are calculated for a
>"Z bump" of 1.25 inches, a much longer connector, such as the long bulkhead
>ones I have seen at Ham swaps, can cause SWR problems even at HF!
>
>So like I said it all "depends", and using "N" connectors, or other
>"constant Z" connectors, may not be such a dumb thing do, even below 400
>MHz.
>
>IMHO I guess it pays to go back and reexamine rules-of-thumb. Its amazing
>what a little bit of investigation teaches one about how these
>rules-of-thumb come about, and how to apply them in an intelligent manner.
>Ham Radio, its a learning process for me as much as getting on the air and
>yacking with other operators.
>
>--
>Leland C. Scott
>KC8LDO
>
>
>
>
>
>
>
>

460. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819140525.11263.00000324@ng-fa1.aol.com>
Source record: 182220

prompting for some opportunistic attacks?

bored huh?

>
>I suppose we will next see some claim that the 2M MEASUREMENTS are not in any
>way applicable--even as a guide--to 20M.
>
>Sigh.
>
>Let me know when you have the 30M K2 up.
>
>73,
>Chip N1IR
>
>
>
>
>
>

461. Re: Fractal Flyer Sensitivity Performance Questioned...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819141022.11263.00000325@ng-fa1.aol.com>
Source record: 182221

the hardy boys and the kryptic letter

>On 15 Aug 2000 23:29:01 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
>
>>>>>Thanks, Tom
>>>
>>
>>Tom, looks like you fell for another Freak alias :-)))
>
>Damn, You're right Yuri.
>
>You can't tell a legit newsgroup poster from a Fractenna poster unless
>you do a Dejanews search, and also look at the posting path.
>
>
>"M Wallace" path was:
>Path: blue.aol.com!audrey04.news.aol.com!not-for-mail
>
>
>Fractennas last path was:
>Path: blue.aol.com!audrey04.news.aol.com!not-for-mail
>
>Dejanews says:
>Results for: "mmwallace120741" Save this Search
>SEARCH AGAIN for "mmwallace120741" in Deja.com Products | on
>Northern Light Discussion Forums View all >>
>
> >> rec.radio.amateur.antenna
>Messages
>1-3 of 3 matches
> Page 1 of 1
>Date Subject Forum Author
>08/16/2000 Re: Lawsuit rec.radio.amateur.ant K1BQT
>08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant
>MMwallace120741
>08/15/2000 Re: Fractal Flyer Sensitivit rec.radio.amateur.ant Tom
>W8JI
>1-3 of 3 matches
> Page 1 of 1
>
>Right you are Yuri, another fake supporter added to Chip's AOL account
>as a new screen name. Same posting access point as Fractenna, and
>other name with no posting history until he suddenly appears and
>supports Chip.

>
>Amazing!
>
>73 Tom
>
>
>
>
>
>

462. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <399ED0BF.8C837FD@fgi.net>
Source record: 182222

David,
I am familiar with that type of feed after I did
some work which I consequently obtained a patent
What I found that was interesting was to close couple
a short dipole, split in the middle and fed delta fashion.
varying the spacing of coupling plus also varying the coupling lengths,
provided multiple resonances (a multi point resonant
antenna or multibander)and also can be used as a matching system
I also did some work using a 'U' shaped element so that the
driven element could nestle inside the coupled element.
I would also point out that like the Fractal antenna, it did not
excite the imagination of anybody on this particular group
and I have quietly let it die and moved on to examine methods
of removing nulls in the forward portion of high gain antennas,
i.e. using a an extra reflector to cancel the two forward
nulls formed by a director
Again like the other patent and the Fractal patent this also
failed to capture the interest of the many experienced experts
of this group
However I am so deep in this particular experimentation I am
continuing so I can tie up the loose ends in my report book
before I move on to find something more beneficial to explore
that would interest and provoke discussion with my fellow hams
on this group..
With respect to the coax matching that you mentioned, by
lying inside the driven element brought me to think that the
cross over point of energy from the feed occurred at the
best matching point between the feed and the excited dipole.
This scenario lead me to believe that energy movement
between equivalent capacitor plates occured over a portion
of the meshed plates and not the whole plate area..
This also went over like a wet balloon with the experienced
people of this group so I dropped that idea also.
Of course all of this experimentation is because of the
'fun of the chase' or 'the hunt' as part of the hobby and not to
assume that you are a antenna expert which is the point
where unpleasant things happen..... but I digress...
Regards
Art Unwin KB9MZ

David J. Windisch wrote:

> Hi, Art:
>
> Re your query:

>
> Mosley calls it 'the Classic feed', or something like that. They had 2
> pieces of '8U center-conductor-with-insulation-but-no-braid connected as a
> sorta-dipole *inside* the halves of the DEs of some of their antennas. No
> mechanical connection.
>
> Fwiw, I always got good performance from the S402 -- its c-l inductors were
> on big ceramic forms, and if you hammered plastic blocks inside the
> element-to-boom tube centers and drilled them for the u-bolts, the elements
> stayed put ... but that's another tale. If I ever catch up with the
> economy I'll build a chinese copy if I can't find one to buy.
>
> Hth. 73, Dave, K3BHJ

463. Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: jason_hsu@my-deja.com
Message-ID: <8nmkaeagq1@nnrp1.deja.com>
Source record: 182223
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Has anyone here homebrewed a SIMPLE loop antenna? I have read a few articles on the ARRL site on loop antenna projects. The loop antennas seem to offer decent performance for an apartment, and the fact that loop antennas are balanced eliminates the need for an RF ground.

I should note that I don't want to buy a soldering iron (due to the fact it is a fire hazard and I don't have a workshop), drill, hacksaw, or other dangerous equipment. Also, I have NO experience in homebrewing amateur radio equipment. Can I build a loop antenna using just simple tools like a screwdriver, hammer, and socket wrenches?

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com http://www.deja.com/
Before you buy.

464. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <7NAn5.2040$kM2.249092@newshog.newsread.com>
Source record: 182224

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"'Doc" <w5lz@oio.net> wrote in message news:399EAE85.DF81CF53@oio.net...
>
>
> Roger,
> If you would change the 'acetone' to 'acidic acid',

I did, about an hour after the original post, but unfortunately the
correction is small and the original will be around fore ever.

I'd have deleted it, but after an hour it had probably propagated to a good
many other servers. <sigh>

And my "preference" is DC-4 compound where I wat a water barrier *inside*
when using 9913 type cables. I prefer the Marine, liquid electrical tape for
the ourside. It takes a couple of coats and some drying time between, but
I've found it to be quite durable and very effective..

I would
> agree with you (but never had a circuit 'fall apart' yet).

This was in industry and was a very expensive lesson.

Roger (K8RI)
> I also found a substitute if you can't find silicon. I was
> away from home and needed to seal a center connector on a dipole.
> Went to Wal Mart, no silicon like I wanted. Was wandering through
> the sporting goods section and found some stuff called "Shoe Goo".
> I won't try to explain it, go read the instructions on the tube,
> then you try explaining it (LOL). Anyway, tried it, and it does
> work. It gets brittle after abotu a year, so it isn't a permanent
> seal (but when you think about it, that's not a bad idea). It
> also comes in handy for a bunch of other things......FWIW.
> 'Doc

465. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399EDC4A.96B3AF03@eznec.com>
Source record: 182225

Floyd Sense wrote:
>
> I have no doubt that many of you have experienced the corrosive effects you
> describe. However, I've used the off-the-hardware-store-shelf variety of
> silicone sealer (always the clear type) made by GE or Dow, for decades.
> I've taken apart connections that were sealed with the stuff and have never
> found anything but bright, clean, dry connections. . .

That's been my experience also.

Roy Lewallen, W7EL

466. A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <399EE005.9F5CDF4@tri.net>
Source record: 182226

A saturday afternoon musing: What does my KW see and what do I sound like if I put up a colinear array with tanks rather than phasing lines? Don't do the math, I'm not going to do it!

N0UU

in reply to:

Date: Sat, 12 Aug 2000 11:09:21 -0700
From: Roy Lewallen <w7el@eznec.com>
Subject: A collinear conundrum

I'm bothered by the statements that a resonant parallel tuned circuit is

different than an insulator "because of the circulating current". IF the

parallel tuned circuit is lossless, and IF it's exactly resonant, and IF

you're considering its steady state operation at only one frequency, the

resonant parallel tuned circuit is indistinguishable from an insulator. It will be different under transient conditions, that is, when power is first applied and the stored energy is building up or when power is removed and the stored energy is released. But in steady state at one frequency, a resonant parallel tuned circuit will behave exactly like an

insulator.

Roy Lewallen, W7EL

467. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Doug Salisbury <dssalisbury@earthlink.net>
Message-ID: <D4Bn5.1074$UJ5.81785@newsread2.prod.itd.earthlink.net>
Source record: 182227
Cross-posted to: alt.comp.hardware.homebuilt,alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.basics,sci.engr.safety,sci.geo.meteorology

```
Your homeowners will not cover electrical damage to electrical equipment
unless you have it endorsed. The same for renter's.

--
D. Salisbury
"Richard Currin" <Richard_Currin@ncsu.edu> wrote in message
news:398EA9D9.F429BBC5@ncsu.edu...
> I think those warranties sound a lot better that they are. We have had
several
> pieces of equipment damaged by lightning that were "protected" by APC.
The
> catch is you need to send in the equipment. How long can you go without a
PC
> that is so important that you bought protection for it? If you have a
lot of
> spares than maybe it's ok.
>
> Will wrote:
>
> > Not exactly true. As with other sorts of policies, like theft or fire,
> > the insurer will often give you a substantial discount on your premium
> > if you take proactive measures to prevent damage from happening. This
> > usually is a sum greater than the cost of installing such equipment. It
> > is certainly worth a phone call.
> >
> > Mark Kinsler wrote:
> > > Your homeowner's or
> > > renter's insurance policy probably already includes lightning damage
> > > protection, and the insurance company doesn't care if you use any sort
of
> > > protective device or not.
> > >
> > > So keep your files backed up
> > > And your insurance paid up.
> >
> > Good advice.
> >
> > de Will KD7BFX
>
> --
> - Richard Currin
> Facilities Agricultural Engineer I
> University Field Labs, NC State University
```

> Phone: (919) 515-2823 Email: richard_currin@ncsu.edu
>
>
>

468. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819151912.11496.00000566@ng-fy1.aol.com>
Source record: 182228

>Tom is absolutely right. The only way to get someone like Chip
>off the newsgroup is to totally ignore him. Of course, it may take
>some superhuman discipline to keep from responding to his
>puerile, irritating, little posts, and people should expect a
>rising level of desperation on his part as his trolls are
>increasingly ignored, but, it's the only truly effective
>way to deal with him.
>
>Tom Donaly KA6RUH
>
Tom D. Is absolutely right.
If a subject I discuss is not to your personal liking, execute your privilege
to ignore. That is a wonderful idea, I heartily endorse.

73
Chip N1IR

469. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819152025.11496.00000567@ng-fy1.aol.com>
Source record: 182229

>Let me get this right, A major telecom firm contacted him to tell him
>that one of their chief engineers wouldn't have anything to do with the
>technology? THAT is strange!
>
>Dave, Kc6old
>
Yes, based upon the 'fractal chat' on the newsgroups.

He wasn't referring to my responses either.

73
Chip N1IR

470. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819152452.16044.00000385@ng-fy1.aol.com>
Source record: 182230

>Salut,
>
>It is very unlikely for a company to make such a statement out of the
>cold.
>
>The truth is Doctor Fractenna upsetted several major companies,
>pretending they were going to use Freactennas on a large scale.
>
>
>--
>Gilbert.
>
Nonetheless, it is the truth; I stake my career on its veracity.

NC

471. Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <399EE2F0.38B97D2C@tri.net>
Source record: 182231

I've thrown this out before, but new people asking:

My present and hopefully final QTH had such CCRs. I bought the first lot and insisted before closing that I get a letter from the homeowners assn (then only the builder) allowing my antenna (65ft tower with antennas on top). Got the letter, filed it with the deed. Later purchasers protested, but it is a done deal.

Other way to do it is to get ALL of the owners in the assn to sign off. We did that for a guy that inadvertently (a term often used in medical mal cases: one meaning something like 'carelessly, without regard to ....don't use that word) put his garage on the right of way. We bailed him out by changing his easement. Tried to do it again for one family on a 15 A lot so they could have 2 sheep for a 4-H project and another to have 6 hens again for a 4-H project....two old biddies refused so they are stuck. Actually made a deal with the guys on their back fence and moved them over there!

The other way I did a long time ago in Wichita was to go around and photograph all of the TV antennas left over from the pre-cable days, I think there were 15 or so in the assn. Filed a suit naming the developer and assn stating that the covenants were already broken, that others were also violated, so the CCR were invalidated. Got a letter from the developer's atty that if I would withdraw the (not yet filed suit), they would let me keep the 30 ft tower with the KT-34. A quiet victory.

There are ways.

N0UU

472. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <xfBn5.2046$kM2.250186@newshog.newsread.com>
Source record: 182232

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"'Doc" <w5lz@oio.net> wrote in message news:399EB296.ADBD6A60@oio.net...
>
>
> Roger,
> Without doing any calculations I can tell you that your system
> is not going to be to 'Rohn' specifications.

That I know, but there was no alternative.
I can move the top tier anchor down to the concrete, and probably will, but that even with the extra tension exerts less side pull on the anchor than the lower guys.

> The primary reason
> being the guy posts.

Yup

> Two yards of concrete for the base is marginal.
> (I wouldn't think it would be but it is.)

According to the specs I have about the right anchor size for the tower (It's 30% larger than the weight of the one they list), but that would be with all anchors at ground level.

Actually I can move all of them except the lowest, down and there the clearence is required.

> It depends on the make up
> of the soil in your area, the amount of concrete used, and the shape
> of the concrete pier.

Good soil, (clay that is harder than a rock), two yards plus a tad in a rectangular shape. The tops are about 2 feet below the surface.

> Not being an engineer, my advice isn't the
> 'best', but 'Rohn' might help you (if you can get them to answer at
> all).

I used their book and a good safety margin with the guys and 30% on weight fot the anchors. (The mason gave me a figure of 5700# per yard which is 11,400#) I've also been working with a consultant, but second opinions are always appreciated (I have complete faith in no one <G>)

The man thing in my favor is that there is very little load imposed by the bottom set of guys except for the tension.

I can reinforce the pipe and put in a I-beam brace at about 30 to 40 degrees. That will take virtually any give out of the pipe and the anchor point will become the equivelant of the concrete. I've seen anchors similar that were made entirely from I-beam welded up, in much larger installations..

My point of contact with them was Jeff Moran.

So far the installation is fine with them except that elevated anchor. It'll hold, but reducess the wind load capability to about half, but they use quite a safety factor. It's already far more solid than the old 90 footer.

The problem is that with the heavier load we could run into oscillation I don't think there would be any problem should I stay with the same antennas as the old tower.
For this season I'm probably going to move the top two tier of guys to the concrete which will put virtually all the wind load directly into the concrete and eliminate the oscillation.

Reinforceing the pipe will *probably* be more than sufficient to handle the bottom tier as they are already rock solid. It's only with the addition of the tension fron the second tier (where the Kevlar is still springy) that I notice that tiny bit of spring in the post. It's not something you can walk up to the post and do. You have th really throw your weight around well up the tower (60 feet or higher) and with equipment I weigh about 190#. Even then I can barely feel any movement.

I'm using torque arms at the second and third levels and was told I'd notice some movement because of that. They prevent torquing, but add a little flexibility...

There is no movement down at the first tier which is the straight hook up without the torque arms.

Thanks,

Roger (K8RI)
> 'Doc

473. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399eded3.35571202@news.akorn.net>
Source record: 182233

On Sat, 19 Aug 2000 13:48:04 GMT, Dale Parfitt <GTE/parinc@GTE.net>
wrote:

>I must agree with Tom- there is no reason a loop would be more quiet.
>Many seem to think the 1 wave loop is an omni- it has a pattern almost identical to
>a half wave dipole with slightly less gain. On 160M my loop was a little narrower in
>BW than the dipole- same height above ground.
>
>Dale W4OP

If loops had some advantage, I'd sure use them for receiving! My best
receiving antenna remains my array of verticals.

Of course there might be cases where a loop puts a null in the
direction of local noise, so your mileage might vary. But the fact
it's a loop has nothing to do with S/N ratio.

As for gain, model a low horizontal fullwave loop and have a look. It
is essentially the same as a dipole on bands where it is close to
ground. On the higher bands, it has so many nulls you're as likely to
have a signal fall in a null as on a lobe.

That doesn't mean they don't work or work poorly, just that they sure
aren't some kind of magic cure-all. There is one neat thing that
happens, they have a reasonable impedance on multiples of the Full
wave frequency. Now that's a neat thing, compared to the wild
impedance changes of an all-band dipole from band to band. If I worked
multi-bands with one antenna, I'd consider one for that reason.

73 Tom

474. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <RkBn5.2047$kM2.250409@newshog.newsread.com>
Source record: 182234

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"TyllEulenspiegel" <tylleulenspiegel@aol.com> wrote in message
news:20000819125611.11263.00000302@ng-fa1.aol.com...
> sounds like ur tuning the tower for
> the ultimate
> thwang!
>
Looks like I can eliminate most of it when the Kevlar guys finish stretching
which should be soon and in addition I'm going to move all, but the bottom
tier of guys to the base of the pipe...Anchoring right at the concrete..

I'm stuck using the pipe to support the first tier at 10-12 feet above grade
and they, of course, put the most side load on the anchors which are
absolutely solid with out the added tension of the other guys.

Roger (K8RI)

> >OK, for the engineers, or mathematically inclined...
> >
> >I've installed a Rohn 45G, but due to a driveway I had to raise the guy
> >anchor point 10 feet and do it on all three anchors to keep the system
> >symmetrical as well as out of the way.
> >
> >I did this by using five inch diameter heavy wall steel pipe which sets
in
> >two yards of concrete, the base of which is six feet below grade. The
> >anchors are out 80% of the tower height., or roughly 80 feet. (79 is you
> >want to be specific)
> >
> >The guys are tensioned to 10% of their breaking strength or 400# for all
> >guys on the bottom two tier (31 and 65 feet elevation) and 600# for the
top
> >tier (96 foot elevation).
> >
> >Now, to those who have installed towers up to 50, or even 60 feet, this
> >probably sounds like a rather sound guying of the installation and they
are
> >sturdy...Unfortunately at 90# per section of tower and all that guy
tension
> >they are also just a wee bit flexible as are freshly installed
Phillistrand
> >guys. Not enough to really notice while climbing the tower, but (without
```

> >taking the time to calculate the horizontal pull 10 feet up, on the 300#
> >pipes set in over 11,000# of concrete) that horizontal moment is
substantial
> >and leads to a tiny bit of flexing. (it don't take much)
> >
> >If you place a hand on any of the guy anchor posts you can feel every
touch
> >of the wrench to bolt, or every step from tower cross rung to rung.
> >
> >Most of the stretch, what little there was has pretty much been
eliminated
> >from the bottom tier of guys. The second tier is getting better.
> >
> >The top guys will come in steep enough that they can be anchored right at
> >the top of the concrete pier, or base of the five inch pipe. It will
have
> >to be offset far enough that the guy lines will not rub where they cross.
> >
> >As the goal is for three independently controlled arrays on the tower,
the
> >flex must be kept down to an absolute minimum. The HF array at the top
of
> >the tower will be roughly 18 sq. ft (and near 200#), with a 6 sq. ft
antenna
> >about 12 feet above that ant about a 4 sq. foot array 12 feet above that.
> >The stretch in the Kevlar (Philistrand will pretty much be eliminated
after
> >a couple of weeks at tension...Actually they are retensioned at roughly
> >three, seven, and 14 days after the initial tensioning at installation.
> >
> >
> >The five inch diameter pipe is a more interesting case as tightening the
guy
> >lines properly puts the pipe/system almost "in tune". Over tensioning
can
> >make for a very interesting situation. Similar situations can be found
it
> >steel guys are not properly positioned and tensioned.
> >
> >Here, "I'm thinking" of changing both the resonant point and rigidity of
the
> >pipes by possibly :
> >
> >1. inserting three re-rod and pouring a rich mixture of concrete into the
> >pipe.
> >2. Inserting an I-beam that will just fit and again pouring in concrete,
or
> >3. Welding I-beam to the front of the post to reinforce it and again
filling
> >the pipe with concrete.

> >4. Respace and add a 4th tier of guys?
> >
> >Concrete by itself can be very flexible.
> >I have a 3" pipe set in the ground to support an 11 foot satellite dish
for
> >tuning. With the weight of the dish that 3" post will oscillate at a
rate
> >between one and two seconds per cycle and at an amplitude of about a 4"
> >swing at a height of 6'.
> >
> >The system will work as is, but I want to make the tower as rigid as
> >practical.
> >I'd hate to find that a given load and wind would hit a resonant point.
> >
> >Any suggestions?
> >
> >Roger Halstead (K8RI) www.RogerHalstead.com
> >N833R World's Oldest Debonair? s# CD-2
> >
> >
> >
> >
> >
> >
> >
> >
> >
>
>

475. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ee168.36231478@news.akorn.net>
Source record: 182235

On Sat, 19 Aug 2000 02:27:19 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>Any suggestions?
>
>Roger Halstead (K8RI) www.RogerHalstead.com
>N833R World's Oldest Debonair? s# CD-2

Back guy the guy posts to some fairly deep expandable anchors.

If I were you, I'd calculate some bending moments on those posts.

73 Tom

476. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399EE822.E24F8E07@eznec.com>
Source record: 182236
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Your reluctance to use a soldering iron or other "dangerous" equipment will severely limit your ability to homebrew even the simplest amateur equipment. You'll pretty much have to restrict yourself to what you can buy and plug together. I don't see any way you'll be able to build an antenna (or at least any reliable way you can connect it to your radio) without using a soldering iron.

Roy Lewallen, W7EL

jason_hsu@my-deja.com wrote:
>
> Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
> articles on the ARRL site on loop antenna projects. The loop antennas
> seem to offer decent performance for an apartment, and the fact that
> loop antennas are balanced eliminates the need for an RF ground.
>
> I should note that I don't want to buy a soldering iron (due to the
> fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
> or other dangerous equipment. Also, I have NO experience in
> homebrewing amateur radio equipment. Can I build a loop antenna using
> just simple tools like a screwdriver, hammer, and socket wrenches?
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

477. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000819161930.21828.00000102@nso-fw.aol.com>
Source record: 182237

In article <399AFA7C.AB4B73F4@TM52.com>, Tim Moore <Tim@TM52.com> writes:

>I doubt that the FCC has any control over covenants and restrictions. It
>would
>take a court suit to even find out for "sure".

Two comments, first the FCC probably can preempt CC&R's as it did for television antennas and satellite dishes less than one meter in diameter, it did it, and so far, the preemption has withstood court challenge, and Congress hasn't complained. 2nd, the FCC so far has declined to so preempt for amateur antennas, and it's one of the things that the ARRL among others keeps on pushing before the FCC. Amateur radio may disappear from most places not because hams get too old as one wag once put it, but rather because hams can't get on the air reliably with no antenna.
-art clemons-

478. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Cliff Gieseke <cliffg@texas.net>
Message-ID: <vmCn5.10465$ug2.158382@news5.giganews.com>
Source record: 182238
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

If prone to forgetfulness when having soldering iron on, think of a way to work around it -- could connect it to a timer, for ex. ... (Am very aware of fire safety, being the son of a former fire inspector/fire chief.)

-- Cliff, W4ZFL/5
<jason_hsu@my-deja.com> wrote in message news:8nmkaeagq1@nnrp1.deja.com...
> Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
> articles on the ARRL site on loop antenna projects. The loop antennas
> seem to offer decent performance for an apartment, and the fact that
> loop antennas are balanced eliminates the need for an RF ground.
>
> I should note that I don't want to buy a soldering iron (due to the
> fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
> or other dangerous equipment. Also, I have NO experience in
> homebrewing amateur radio equipment. Can I build a loop antenna using
> just simple tools like a screwdriver, hammer, and socket wrenches?
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

479. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <399EFA06.C4A0EB53@fgi.net>
Source record: 182239

Agreed Tom.
Beams made of concrete and reinforcement wires
are done that way for a reason.
I cannot understand why one
would use a hollow tube as a guy post without the addition of concrete.
I use 4inch diameter posts for at least 20 years on my fold over 45 g
and they are filled with compressed concrete and present no problem with

lifting or lowering my 80 foot boom and prop pitch rotor
which is quite heavy. But we may be missing the real point of the
problem.
Regards
Art Unwin KB9MZ

Tom W8JI wrote:

> On Sat, 19 Aug 2000 02:27:19 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
>
> >Any suggestions?
> >
> >Roger Halstead (K8RI) www.RogerHalstead.com
> >N833R World's Oldest Debonair? s# CD-2
>
> Back guy the guy posts to some fairly deep expandable anchors.
>
> If I were you, I'd calculate some bending moments on those posts.
>
> 73 Tom

480. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: jason_hsu@my-deja.com
Message-ID: <8nmvdd$m8f$1@nnrp1.deja.com>
Source record: 182240
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <399EE822.E24F8E07@eznec.com>,
Roy Lewallen <w7el@eznec.com> wrote:
> Your reluctance to use a soldering iron or other "dangerous" equipment
> will severely limit your ability to homebrew even the simplest amateur
> equipment.
>
Wasn't there a time before people used soldering irons?
--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com http://www.deja.com/
Before you buy.

481. Need Motor Cap for HD-73 Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: BHL <philoxen@hotmail.com>
Message-ID: <qcDn5.419$xi.43924@news7.onvoy.net>
Source record: 182241
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Need the motor cap for my Alliance HD - 73 - 1 Rotor. It is listed as C3, 155 - 189 mfd @ 50WV DC. Norm's is out of them. Any help or leads to help appreciated. BHL philoxeny@hotmail.com

482. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: greg <greg@valkyrie.net>
Message-ID: <399f080e.0@news.valkyrie.net>
Source record: 182242
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

they should put a 5 day waiting period on them tool's !!!

> I should note that I don't want to buy a soldering iron (due to the
> fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
> or other dangerous equipment. Also, I have NO experience in
> homebrewing amateur radio equipment. Can I build a loop antenna using
> just simple tools like a screwdriver, hammer, and socket wrenches?
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

483. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399F01DE.9A9AD4E@eznec.com>
Source record: 182243

No need to do the math. You can easily model it with EZNEC. Even the
demo is adequate.

Roy Lewallen, W7EL

Lawrence Stoskopf wrote:
>
> A saturday afternoon musing: What does my KW see and what do I sound
> like if I put up a colinear array with tanks rather than phasing lines?
> Don't do the math, I'm not going to do it!
>
> N0UU

484. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: n4jzh@knology.net
Message-ID: <399f050f.82377425@news.knology.net>
Source record: 182244
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sat, 19 Aug 2000 21:49:38 GMT, jason_hsu@my-deja.com wrote:

>In article <399EE822.E24F8E07@eznec.com>,
> Roy Lewallen <w7el@eznec.com> wrote:
>> Your reluctance to use a soldering iron or other "dangerous" equipment
>> will severely limit your ability to homebrew even the simplest amateur
>> equipment.
>>
>Wasn't there a time before people used soldering irons?
>--
>Jason Hsu, KB9PNZ
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
Yes there was, it was a Fire and a Wet Blanket
a.k.a. Smoke Signals
Imagine a Pueblo Indian Crankin 35wpm with a wet blanket.
N4JZH

485. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399F0B7C.39E9D64B@eznec.com>
Source record: 182245
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

jason_hsu@my-deja.com wrote:
> >
> Wasn't there a time before people used soldering irons?
> --

Yes, but I'm sure it was before the advent of electronics, and possibly before the discovery of electricity. (Soldering irons were heated in a fire before electricity was readily available to heat them.)

Roy Lewallen, W7EL

486. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: jefff_b@my-deja.com
Message-ID: <8nn3g0qkg1@nnrp1.deja.com>
Source record: 182246
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Jason: You could use wire strippers for your only tool, and get some pre-terminated coax, cut one end off the coax, get some hookup wire, and use the wire strippers to strip the wire ends. Then use wire nuts to connect the hookup wire to the open end of the coax: one end of the loop to the center conductor, the other end to the shield.

To the rest of you guys: where's your imagination?

Jeff
KA1OGM

In article <8nmkaeagq1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
> articles on the ARRL site on loop antenna projects. The loop antennas
> seem to offer decent performance for an apartment, and the fact that
> loop antennas are balanced eliminates the need for an RF ground.
>
> I should note that I don't want to buy a soldering iron (due to the
> fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
> or other dangerous equipment. Also, I have NO experience in
> homebrewing amateur radio equipment. Can I build a loop antenna using
> just simple tools like a screwdriver, hammer, and socket wrenches?
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

487. Special Victim Alert

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000819183932.05150.00000477@ng-fm1.aol.com>
Source record: 182247

Real victims only wish to escape and get away.

"Special victims" can't wait to get their hands on you so they can harang you, insult you, belittle you, sue you, have you arrested, or even have you chopped up and fed to the lions. Special victims frequently assume special rights allowing them to use unusual means to get the job done.

Carried to its extreme, Kenneth McDuff mutilated and murdered eight women in Texas, yet met his final fate on death row complaining bitterly to the end that he was a victim of many forces. But, he wasn't an ordinary victim. He was "special".

If you are threatened in an aggressive fashion by anyone claiming to be victim in a setting where attendance is purely recreational and voluntary (such as this newsgroup), run like hell! They may be "someone special" looking for you.

Towertalk@contesting.com may be a good alternative for those who aren't "special".

Rick K1BQT

488. multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8nn3gtffj1@bob.news.rcn.net>
Source record: 182248

I am considering hanging an inverted L off of a 54 foot Rohn-Spaulding
self-supporting tower. The tower is not guyed.

What I am looking at is about 15 meters vertical, with the L horizontal
section being about 6 meters long.

This will give me .279 wave on 80 meters, and .513 wave on 40 meters. I
am thinking about housing a remotely tuned matching
system at the base of the tower for optimum matching on both bands. The
other option for 40 meters is a dipole at the apex of a
guyed sixty foot Rohn 25G.

What kind of DX performance should I expect from this antenna on 40 meters?
Using Reg's end-fed program, the losses look
very good, but what kind off radiation angle should I expect?

Second question. 160 meters would be nice; I desire something for casual
dxing and operating for the Top Band. The 80
meter L would ends up being about .132 wavelengths with an extremely low
feedpoint impedance of about 8 ohms at 1800kHz.
Resistive losses are horrible. Should I live with the losses and accept the
compromise? I could hang a second L off of the
tower with a longer horizontal section for 160, but I understand that
trying to run two harmonically related Ls from the same
tower would result in unwanted coupling ruining the performance of the
higher frequency antenna. My preferences for best
performance are about equal for 40 and 80, with 160 running third place.
Suggestions for other tweaks are welcome. The
horizontal run is limited to about 25 feet if I am to keep the end at 50
feet or higher.

489. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8nn3gi$b8l$1@heap.juniper.net>
Source record: 182249
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy Lewallen <w7el@eznec.com> wrote:
>Donaly wrote:
>>
>> You're a radio engineer, Tom. What would you do to make an
>> accurate S meter, or even and S meter accurate?
>>
>> Tom Donaly KA6RUH
>
>Tom must be busy having a life, so I'll take a shot at this question if
>you don't mind. What you'd need in order to make an accurate S meter
>(and by this I mean an S meter in which the divisions are an equal and
>known number of dB apart) is to have the AGC voltage be a truly
>logarithmic function of the input signal level. This would have to hold
>over a wide range of signal levels. If I were designing a receiver today
>to do this, I'd probably begin by looking into some of the log amps
>available from Analog Devices. Using one in a feedback loop might do the
>job. Doing it any other way wouldn't be easy. Although a crudely
>logarithmic function is easy to come up with, one which is truly
>logarithmic over a wide range, and reasonably temperature stable, isn't.

I think an accurate S meter is much easier with receivers that use DSP
for the last IF stage and to drive the AGC. Here you typically can't
use the analog AGC voltage directly for an S meter anyway, since the
analog AGC is usually being driven based on the pre-final-filtering
signal strength, essentially to keep the input to the DSP's A/D converter
close to full scale. To run the latter control loop the DSP doesn't
require truly logarithmic AGC response but rather only a degree of
stability and repeatability. The AGC voltage to gain response can
be programmed into the DSP based on calibration derived from the
actual characteristics of the amplifiers, whatever these might be.

Since the DSP is doing the last stage of IF filtering itself it will
hence also need to drive the S meter itself based on knowledge of the gain
it is applying to the analog stages plus the measured (digital) signal
strength after the final filtering is done. Since it inherently needs
to know all of this with reasonable precision anyway, an accurate S meter
(calibrated to whatever S-unit standard the manufacturer chooses) seems
to sort of automatically fall out.

Dennis Ferguson

490. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399f1449.49258870@news.akorn.net>
Source record: 182250
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sat, 19 Aug 2000 22:59:20 GMT, jefff_b@my-deja.com wrote:

>Jason: You could use wire strippers for your only tool, and get some
>pre-terminated coax, cut one end off the coax, get some hookup wire,
>and use the wire strippers to strip the wire ends. Then use wire nuts
>to connect the hookup wire to the open end of the coax: one end of the
>loop to the center conductor, the other end to the shield.
>
>To the rest of you guys: where's your imagination?
>
>Jeff
>KA1OGM

Jeff and Jason,

Any attempt to build a small transmitting loop antenna without using a soldering torch or even a welder will be a waste of effort.

The current in a small loop is many dozens of amperes and higher. The slightest resistance in a connection will destroy efficiency.

With big antennas, you can get away with twisting and crimping connections, but not in small loop antennas.

I'd suggest writing yourself a note and posting it several places, saying "my blowtorch is lit" or "the arc welder is on". That always works for my wife when she is cooking. She wanted to give up cooking for the same reason, but the notes allow her to cook food without starting fires.

73 Tom

491. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Steve <amradio@thebizlink.com.removethis>
Message-ID: <amradio-D561A1.19254119082000@news.erols.com>
Source record: 182251
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <399F0B7C.39E9D64B@eznec.com>, Roy Lewallen <w7el@eznec.com>
wrote:

> jason_hsu@my-deja.com wrote:
> > >
> > Wasn't there a time before people used soldering irons?
> > --
>
> Yes, but I'm sure it was before the advent of electronics, and possibly
> before the discovery of electricity. (Soldering irons were heated in a
> fire before electricity was readily available to heat them.)
>
> Roy Lewallen, W7EL

Actually, quite a bit of homebrewing was done in the 20's and 30's using
Fahnstock clips and terminal and screw connections on a breadboard.
Although there was usually some soldering involved, you could probably
get away with doing none, if you were creative. So, if you are up for
building a 210 TNT rig, you're in luck!

492. 40 foot crank up, tilt over tower FS in Florida

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Ken Simpson <W8EK@fdt.net>
Message-ID: <jMEn5.2728$x16.189514@monger.newsread.com>
Source record: 182252

I have a 40 foot crank up, tilt over tower
available in Ocala, FL.

Presently, it has a KLM KT-34 A tribander on it.
It is not especially heavy duty, but obviously no
light weight either to hold the big 4 element tri-
bander. I would guess that it is home made,
although I am not certain of that. It is in fairly
good shape, but should probably have a coat
of paint before being installed.

The tower will crank down to about 20 feet and up to
about 40. It tilts at the base. Presently it is anchored
at the peak of a roof (about 15 or 16 feet), to hold it
in place and keep it from tilting over.

Obviously, someone would need to be fairly close to
the Ocala (north central Florida) area. I am looking
at $100 for it.

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@fdt.net

493. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399f1680.49826247@news.akorn.net>
Source record: 182253

On Sat, 19 Aug 2000 18:52:52 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>I am considering hanging an inverted L off of a 54 foot Rohn-Spaulding
>self-supporting tower. The tower is not guyed.

I can think of better things to hang, but that would be a good
antenna.

>What I am looking at is about 15 meters vertical, with the L horizontal
>section being about 6 meters long.

15 times 3.3 = 49.5
3.3 times 6= 19.8

OK, 50 feet by 20 feet.

>What kind of DX performance should I expect from this antenna on 40 meters?

It's a mediocre antenna for 40, but pretty fair on 80 if you use a lot
of radials. You are in a good location aren't you? It will probably
work OK up there where Europe is a stone's throw away.

A good dipole would be a lot better at 60 feet on 40.

>Using Reg's end-fed program, the losses look
>very good, but what kind off radiation angle should I expect?

I'd model the antenna and have a look. Some ground loss calculations
under estimate the real losses because they take an overly simplistic
view of what goes on.

>Second question. 160 meters would be nice; I desire something for casual
>dxing and operating for the Top Band. The 80
>meter L would ends up being about .132 wavelengths with an extremely low
>feedpoint impedance of about 8 ohms at 1800kHz.
>Resistive losses are horrible. Should I live with the losses and accept the
>compromise?

Why not put up a nice 40 meter dipole, and tie the feedline together
and work it against a nice ground system for 80 and 160? It could even
be an inverted Vee dipole.

Ever think about that?

73 Tom

494. will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399F1AAD.50DA13FE@attglobal.net>
Source record: 182254

Hi folks. I just set up my ham shack using a Kenwood ts-440s with a dentron mt3000a tuner going to w G5RV. I have a good size spool if #12 AGW stranded copper (insulated). Will that be a sufficient ground. it's going about 20 feet or so down to and across the floor joists and out to the ground rod that the electrical system is hooked to. there's no closer route to the outside and the ground rod is right there so there really aren't any other options. Unless you're going to tell me to sink a separate rod. I don't know so that's why I'm asking.

Also while I'm on the subject, the G5RV is about as high as I can get it in the trees, but the twinlead, which hooks to a balun and then coax will just reach the ground. Rather than having it laying on the ground I have it looped back up and the coax runs across the ridge of our roof and into the ham shack which is on the other side of the house. Any problems there, or rather, is it OK as long as it works?

Thanks for the help.

N3TNS
Wayne

495. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <9hifOYFO0qV7Ke9gWu7915A7n4RG@4ax.com>
Source record: 182255

jason_hsu@my-deja.com wrote:

>Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
>articles on the ARRL site on loop antenna projects. The loop antennas
>seem to offer decent performance for an apartment, and the fact that
>loop antennas are balanced eliminates the need for an RF ground.
>
>I should note that I don't want to buy a soldering iron (due to the
>fact it is a fire hazard

A soldering iron is not a dangerous fire hazard. Each iron comes with
a little metal stand that insulates the hot tip from the work surface.

You can also buy a soldering gun-- it heats up in seconds, solders
your joint, and then shuts off after you release the trigger.

Buy a soldering iron or gun, some solder, some wire strippers;
otherwise, forget ham radio.

Bob
k5qwg

P.S.
A small, kitchen-style wooden chopping block makes a good work surface
for soldering.

and I don't have a workshop), drill, hacksaw,
>or other dangerous equipment. Also, I have NO experience in
>homebrewing amateur radio equipment. Can I build a loop antenna using
>just simple tools like a screwdriver, hammer, and socket wrenches?

496. What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399F1D6A.5923D447@attglobal.net>
Source record: 182256

I really don't get it. What is all this Fractenna stuff about. I've been watching this news group for a while trying to learn a few things from people's input on antennas, and all I read is this stuff (could have used a more aromatic word here to describe it) about Fractenna, lawsuits, patents, and God knows what. Why don't you all just ignore him. All you're doing is feeding him (or them... I haven't really figured it out) with a reason to argue and a whole string a subsequent replies and more name-calling and bitching...

This seems like poison ivy, scratch it and it still itches but spreads like crazy, ignore it and soon enough it will go away... hopefully.

497. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8nn85a$k54$1@bob.news.rcn.net>
Source record: 182257

The problem with the last ideal is that the coax runs are about 100 feet and
are run underground in 4" PVC pipe.

I suppose if I am going to go to the bother of a remote tuning box, it would
be feasible. I don't have a clue how to calculate
the matching networks since I don't have any modeling programs. (I knew I
bought that AEA HF analyzer
for a reason.) Wouldn't the average effective vertical height be lowered by
the average height of the sloping Vee dipole elements
when run on 80/40? What effect would a balun have--or should the balun be
eliminated in this particular application? It seems
like it (a balun on the dipole) would try todecouple the dipole elements
when the feedline is fed as a vertical.

73

Pete

> A good dipole would be a lot better at 60 feet on 40.

>
> Why not put up a nice 40 meter dipole, and tie the feedline together
> and work it against a nice ground system for 80 and 160? It could even
> be an inverted Vee dipole.
>
> Ever think about that?
>
> 73 Tom

498. Re: What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <399F2D74.D62E2D57@fgi.net>
Source record: 182258

Wayne Grauel wrote:
snip..

>
> This seems like poison ivy, scratch it and it still itches but spreads
> like crazy, ignore it and soon enough it will go away... hopefully.

Oh Wayne you have surely never had poison ivy onslaught!
How do you ignore it.? Please tell me more.
I am at the end stages of my second attack this year.
Being foreign born I am very much open to attack
without a semblance of an immune system since
poison ivy is native to North America.
Thank goodness there is no poison oak in this vicinity.
Could it possibly be that you never owned a stick
to slide down the cast when you last broke a limb ?
Regards
Art Unwin KB9MZ

499. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8nna6d$a44$1@bob.news.rcn.net>
Source record: 182259

Any suggestions on the tuning box... Did you use a balanced tuner or did
you use a balun on the ladder line...
I assume I should make my own ladder line out of number 10 copper with some
decent ceramic spreaders.

Pete

Tom W8JI <2w8ji@contesting.com> wrote in message
news:399f238f.53169843@news.akorn.net...
> On Sat, 19 Aug 2000 20:15:28 -0400, "Peter Bertini"
> <commquart@erols.com> wrote:
>
> >I suppose if I am going to go to the bother of a remote tuning box, it
would
> >be feasible. Wouldn't the average effective vertical height be lowered
by
> >the average height of the sloping Vee dipole elements
>
> It will lower the effective height a tiny amount, but not anything
> worth worrying about.
>
> > when run on 80/40? What effect would a balun have--or should the balun
be
> >eliminated in this particular application> I'd feed the thing with 1/2 wl
of ladder line on 40. Then you can do
> whatever you like in a box out at the antennas base.
>
> That's what I did on my restricted lot, before I moved.
>
>

500. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <399F3303.8B17D217@sccoast.net>
Source record: 182260
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

jason_hsu@my-deja.com wrote:
>
> Has anyone here homebrewed a SIMPLE loop antenna?

Nice responses, guys (Roy, Donnie, Steve, Cliff, Greg, Jeff, and Tom). Its nice to see so many positive responses, and humor, in this newsgroup. Give yourselves a good pat on the back (but don't get carried away with it - some might think it a little strange to see you hitting yourself like that).

And, Jason, I agree with them. It is going to be difficult to build an antenna without using a soldering iron at some point.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

501. Re: What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399F4600.1AA6578C@oio.net>
Source record: 182261

Wayne,
I know your right. It's just that it's so much fun to 'poke'
at him, and it's so easy! Here, I'll lone you my stick... Don't
'poke' real hard... Just point it at him. Watch him have a "knee-
jerk" reaction. More fun that throwing a ball for the dog!
(ol'Frac will even bring it back!)
'Doc

502. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <399F4A64.CD2F9270@fgi.net>
Source record: 182262

Roger Halstead wrote:

> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Arthur Unwin" <aunwin@fgi.net> wrote in message
> news:399EFA06.C4A0EB53@fgi.net...
> > Agreed Tom.
> > Beams made of concrete and reinforcement wires
> > are done that way for a reason.
> > I cannot understand why one
> > would use a hollow tube as a guy post without the addition of concrete.
> > I use 4inch diameter posts for at least 20 years on my fold over 45 g
> > and they are filled with compressed concrete and present no problem with
>
> Going back to my original post...., or the one after it, or one some where
> in there... I mentioned reinforcing and pouring. Either rerod and concrete,
> or more likely I-beam and pouring, and moving at least the top tier of guys
> down to the concrete.

Well if you are feeling movement on the tower I would certainly anchor to the
ground
with that said the idea of posts seem redundent.If posts have to
be used and I particularly like them because the kids would trip over the wire
I would be inclined to still use tubular posts with concrete well tapped in for
compression
resistance and buckling prevention since it is the feel of excess deflection
that you are sensing
and the concrete should provide the stiffness required in your existing posts.
Combination of concrete with an I beam does provide a series of other problems,
If the I beam alone will not do the job I would look elsewhere
Standard thinking is to always stay the posts as Tom mentioned but it does
provide more clutter.
Ofcourse to be sure then one has to determine Second moment of Area for both
arrangements
and substitute in
M/I = f/y= E/r, at your own risk. Especially if you are unfamiliar with the
above series of structural calculations as aplied to beams in encastre
.
Regards
Art Unwin KB9MZ

>
>
> As I recall the bending moment is around 4500#

> But will drop to about half that with the top two tier being moved to the
> concrete.
>
> >
> > lifting or lowering my 80 foot boom and prop pitch rotor
> > which is quite heavy. But we may be missing the real point of the
> > problem.
>
> Well, actually I was looking for the best method for reinforcing the posts
> and locating the anchor points.
>
> Roger (K8RI)
>
> > Regards
> > Art Unwin KB9MZ
> >
> > Tom W8JI wrote:
> >
> > > On Sat, 19 Aug 2000 02:27:19 GMT, "Roger Halstead" <rdhalste@tm.net>
> > > wrote:
> > >
> > > >Any suggestions?
> > > >
> > > >Roger Halstead (K8RI) www.RogerHalstead.com
> > > >N833R World's Oldest Debonair? s# CD-2
> > >
> > > Back guy the guy posts to some fairly deep expandable anchors.
> > >
> > > If I were you, I'd calculate some bending moments on those posts.
> > >
> > > 73 Tom
> >

503. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399F4780.8FD555BB@oio.net>
Source record: 182263

Wayne,
I wouldn't worry too much about an RF ground, not being on the ground floor, it would be 'tuff' to do. Just make sure you have an electrical ground and forget it unless you have RFI problems. You may or may not have problems by 'looping' the twin-lead portion of the G5RV. It should run clear of surrounding objects. But, as they say, 'if it works, don't fix it'. By the way, if that Dentron3000 won't tune it, it can't be tuned!
'Doc

504. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399F481C.63C255DE@oio.net>
Source record: 182264

Set'em up Joe wrote:
>
> On Sat, 19 Aug 2000 11:05:15 -0500, 'Doc <w5lz@oio.net> wrote:
>
> >
> >
> >Set'em up Joe,
> > Careful there Joe! Just like the 'live' ones,
> >one 'sharp' answer, and they'll 'blow up' on you!
> > 'Doc
>
> Gee Whiz, guys! I don't want an Inflatable.
> I've already got too much of the real thing. No, I
> want one of those plastic decoy XYLs. After all, I
> want the crows to git, not be trying to hump her!
>
> What's a OM gotta do,
>
> Andrew
> KG4JBM

NOPE! Ain't touch'n that one!
'Doc

505. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <399F6F4F.450E0FA3@eznec.com>
Source record: 182265

sideband wrote:
>
> Hrm... Veracity? Don't you mean validity? Veracity doesn't mean truth, it
> has a wholly different meaning... I guess such an educated man as a PhD
> (Piled Higher and Deeper?) would know something of this sort.
>
> Just my two cents.
>
> -SSB

Looks to me like Chip used the word correctly.

ve-rac-i-ty 1. Devotion to the truth : TRUTHFULNESS 2: power of
conveying or perceiving truth 3 : conformity with truth or fact :
ACCURACY 4 : something true <makes lies sound like _veracities_>

-- Merriam Webster's Collegiate Dictionary, Tenth Edition. Every poster
should have a copy, regardless of degrees or lack thereof.

Roy Lewallen, W7EL

506. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <fiqups4bpncrjjfrembse9mgndi6fv8dpt@4ax.com>
Source record: 182266

Gray Frierson Haertig <gfh@haertig.com>
shared these priceless pearls of wisdom:

->One antenna manufacturer recommends flooding outdoor Type N connectors
->with petroleum jelly before connecting. I admit this makes me a bit
->nervous, but I haven't seen any failures yet in installations up to 250
->watts VHF after several years. It's an interesting idea. Does anyone
->else have any experience with this?

Yes. We used to use flooded Vaseline connectors with plain old sleeving tied with wax cable back in "the old days" before shrink and silicone. Other than a freakin' mess if you ever had to work on them after mating, they worked just fine and lasted forever. This was in the 120 MHz. range with powers of 25 to 100 watts.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

507. Re: Nice NG? Well Said

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399EB24A.41954D9B@qth.com>
Source record: 182269
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Incredibly well said..even if I didnt know that "one " word...Ill look it up,
its a great word!! Murray

"David J. Windisch" wrote:

> NC:
>
> What *would* lead in some way to your contributing to a new chapter in the
> history of this NG, by simply leaving it?
>
> Would you consider entering democrat politics, where your desires to
> demonize the holders of opposing opinions, and your tiresome bloviations
> about vast conspiracies, lawsuits, and victimhood, would probably find an
> eager
> audience?
>
> Can we help you find your way out, pls?
>
> Why would a person such as yourself want to subject himself to the milieu
> you describe?
>
> Take your own excellent advice.
>
> Stop reading the materials here.
>
> Stop posting to the NG here.
>
> Go away to the dot-com you have created and stay there.
>
> We here have enough intestinal and other fortitude to do without your
> presence on the NG.
>
> We do not wish you ill.
>
> We wish nothing more than for you to get out, stay out, and don't come back.
>
> Is there any part of 'get out, stay out, and don't come back' that you do
> not understand?
>
> If so, ask your attorney to explain the phrase.
>
> Take fill dirt, the Zero Knowledge Transferable character, with you.
>
> K3BHJ

> **********
>
> NC bloviated, in part, somewhere, about this NG:
>
> Copyright violation; impersonation; libel;prevarication about proper
> copyright
> and pending patent notification; misleading and incorrect assessment; and so
> on
> will NOT lead in any way to my leaving this NG.
>
> If you do not wish to read the materials, then don't.
>
> What has resulted from this abuse is a new and global interest in exactly
> the
> kind of mischief that has been promulgated here. I will actively assist any
> and
> all scholars, legal types, and press who want to investigate this active
> attempt to destroy a new technology and the inventor and company that go
> with
> it.
>
> To my knowledge, this is a new chapter in the history of the internet.
>
> NC

[One or more binary attachments are retained only in the source text.]

508. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <399e8b1c.808670@news.mcn.org>
Source record: 182270

On Sat, 19 Aug 2000 11:24:54 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Sat, 19 Aug 2000 03:17:44 GMT, "Roger Halstead" <rdhalste@tm.net>
>wrote:
>
>>
>>I've even used the bathtub calk to seal coax to dipoles and it turned green
>>where the stuff contacted the copper wire. Course out there and with heavy
>>wire it's not really a problem, but finer wires, solder, and foil in
>>contained spaces are bad news.
>
>You never ever want to use vulcanizing sealers on lines, use something
>that stays gooey.
>
>The best compounds are things like GE dielectric compound silicon or
>the stuff made for CATV systems.
>
>Use a bit sparingly inside the connector on the threads. Use a heat
>shrink with goo imbedded in the shrink, like CATV companies use
>outdoors and underground.
>
>If you don't use that, use good tape and cover it with vapor wrap or
>auto body seam sealer that stays flexable.
>
>73 Tom

Tom,

Have you ever tried liquid electrical tape it's made by a Star brite
located in Ft Lauderdale, FL. I get it at the local hardware store and
it is the best stuff I have ever found for sealing coax connections &
etc.

Danny

509. Re: HF loop antenna close to ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <YIwn5.6118$uX.11960@newsfeed.slurp.net>
Source record: 182271

Hi, OM:

If all of the pieces of the aluminum are *well-connected* to each other, you'd probably do better using the roof as a groundplane for a trap-vertical. I have done this in the past, after bonding the pieces on an outbuilding roof.

The ddrr (directional-discontinuity-ring-radiator?) isn't a good antenna unless it's scrupulously constructed with *large*-diameter stovepipe(!) ... do a google.com search on 'ddrr antenna' for a VE2something who really did the ddrr up brown; the site has impressive pix, and the chap may respond to email. Iirc, he phased 4 of them in some sort of array.

Lotsa luck what ever you do ... 73

Dave, K3BHJ

510. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <399E8324.740008B6@GTE.net>
Source record: 182272

Tom W8JI wrote:

> On 19 Aug 2000 01:16:17 GMT, k9sqg@aol.com (K9SQG) wrote:
>
> >Theory and my empirical data do NOT support the notion that all signals will be
> >down with a loop antenna compared with all other antennas.
>
> Who said that?
>
> >On receive, the loop produced 1-2 S units of less noise and signals could be
> >heard with the loop that could not be heard on the vertical.
>
> That could only be because the loop happen to have a null in the
> direction of noise that made noise reception less than the response to
> desired signals.
>
> At HF, gain doesn't matter for receiving unless the system has extreme
> sensitivity problems.
>
> Loops are not more quiet than any other geometric form, unless the
> antenna happens to respond less to the direction of noise compared to
> response in the direction of the desired signal.
>
> 73 Tom

I must agree with Tom- there is no reason a loop would be more quiet.
Many seem to think the 1 wave loop is an omni- it has a pattern almost identical to a half wave dipole with slightly less gain. On 160M my loop was a little narrower in BW than the dipole- same height above ground.

Dale W4OP

511. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Brian Hemmis <K3USC@att.net>
Message-ID: <B5C418D2.3116%K3USC@att.net>
Source record: 182273

you want an INFLATIBLE DOLL ??

512. Re: WTB: RF ammeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ujxn5.6159$uX.10630@newsfeed.slurp.net>
Source record: 182274

Fwiw, I now use easily-found-at-wwgrainger Fluke thermocouples in series with lines for relative measurements. Simply measure the microvolts generated. Move and repeat.

Got truly incensed at myself for burning out one of my two 250-mA rf-milliammeters ... anyone else done that?

73 and GL, Dave, K3BHJ

513. Re: THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <2zxn5.8770$pu4.685436@typhoon.ne.mediaone.net>
Source record: 182275

Interesting self analysis fracky....I
don't buy, however, that your despicable
behavior is only from your inherited money.
Perhaps with this newly found insight, you
can start on that long road towards recovery...
We all hope so...meanwhile, go elsewhere
and STOP harassing the fine folks on this NG!!

514. Re: THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819112204.11587.00000453@ng-fy1.aol.com>
Source record: 182276

>Interesting self analysis fracky....I
>don't buy, however, that your despicable
>behavior is only from your inherited money.
>Perhaps with this newly found insight, you
>can start on that long road towards recovery...
>We all hope so...meanwhile, go elsewhere
>and STOP harassing the fine folks on this NG!!
>
>

Hi Chuck--

I must confess that there are times when that sort of corruption is tempting.
But someone has to set examples and make progress. Few are chosen; many called.

73
Chip N1IR

515. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819112559.11587.00000454@ng-fy1.aol.com>
Source record: 182277

>Well this logic escapes me. Your peers are disgusted with your
>behavior

Then, Jerry, they should have no problem defending and asserting this and taking it to some logical conclusions. Written affidavits with evidence for such are essential in said cases.

So; where is the evidence?

Right now, the only evidence is one for innovation,that evidence has number 6,104,349.

73
Chip N1IR

516. Re: Answer to Ed's question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819113246.11565.00000475@ng-fy1.aol.com>
Source record: 182278

>Amidst all the dross from the alleged 'deafness' of the K2 Flyer, we have a
>post from a newcomer asking 'what's better'?
>
>Why do we not have an answer for this?
>
>Could it be that, for those who must deal with low heights, a directional
>antenna with equivalent, or nearly equivalent field strength at low (DX)
>angles
>to a 1/4 wave monopole--virtually twice as high--is NOT advantageous?
>
>Or are those who want to hoodwink fellow hams that a new technology is a
>useless one-- do they want to keep other IGNORANT?
>
>Go try it yourself, over real ground:
>
>Model an /18 wave monopole, with, say, 8-10 radials;
>Model a low dipole up 1/8 wave;
>Model a sloping dipole up 1/8 wave;
>Model a horizontal loop up 1/8 wave;
>Model a mobile whip with radials;
>Model any other antenna in a small footprint and low height.
>
>Model these over poor to good ground and look at the field strength at low
>angles, say 5-15 degrees.
>
>Then decide what's a "dummy load" and what's "deaf".
>
>The K2 Fractal Flyer was designed because people ASKED for it. They wanted a
>low height antenna, with no pretensions that it would work like a Yagi up 100
>feet--BUT they wanted something that would be directional and work DX well.
>
>So, go ahead: give us that ideal solution for an antenna restricted to 1/8
>wave
>height. Then tell how the K2 Fractal Flyer compares.
>
>73,
>Chip N1IR

Someone has mentioned a slanted H.

This H antenna is far worse--by almost 2 dB in field strength at low elevations(in this case at 10 degrees).

IF someone does not understand how to properly model an antenna, and gets 'different results', that is there responsibility.

73
Chip N1IR

517. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ZFxn5.6190$uX.12302@newsfeed.slurp.net>
Source record: 182279

Hi, Art:

Re your query:

Mosley calls it 'the Classic feed', or something like that. They had 2 pieces of '8U center-conductor-with-insulation-but-no-braid connected as a sorta-dipole *inside* the halves of the DEs of some of their antennas. No mechanical connection.

Fwiw, I always got good performance from the S402 -- its c-l inductors were on big ceramic forms, and if you hammered plastic blocks inside the element-to-boom tube centers and drilled them for the u-bolts, the elements stayed put ... but that's another tale. If I ever catch up with the economy I'll build a chinese copy if I can't find one to buy.

Hth. 73, Dave, K3BHJ

518. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <5Vxn5.570$UJ5.58487@newsread2.prod.itd.earthlink.net>
Source record: 182280

I have no doubt that many of you have experienced the corrosive effects you describe. However, I've used the off-the-hardware-store-shelf variety of silicone sealer (always the clear type) made by GE or Dow, for decades. I've taken apart connections that were sealed with the stuff and have never found anything but bright, clean, dry connections. Everything I've used smells of acetic acid. I wonder if there isn't something else causing the problem in some silicone compounds? I've never really used the stuff in an enclosed area, so maybe the corrosive material bleeds out if the surface is exposed to air and sunlight?

Usually, I wrap a connection tightly with vinyl electrical tape, then silicone over that. However, connections I've made where the silicone was in direct contact with PL-259 shells have never shown any effects from the silicone.

K8AC
Floyd Sense - Angier, NC

519. Re: Tower Installers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ZUxn5.2024$kM2.243137@newshog.newsread.com>
Source record: 182281

I'd check with the local ham club (members) as they should know the
ins-and-outs for tower installation in your area.

If you can afford it you will probably find construction outfits in the
yellow pages, but it will cost many times the cost of the tower to get it
put up.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

<dandan2@home.com> wrote in message
news:iDrn5.53760$eS6.879773@news1.rdc1.md.home.com...
>
> Anyone know of a company/group that would install a short (25-30') tower
for
> an individual? I want to raise my antenna off my roof, but don't want a
> monstor tower installation, and can't do the physical work necessary to do
it
> myself. I live in the Wash DC suburbs.
>
> dandan2@home.com
>

520. Re: HF loop antenna close to ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <Gayn5.2643$x16.184365@monger.newsread.com>
Source record: 182282

Hi Ken, Dave is right, it's a poor antenna. The only portion of a DDRR that radiates is the short vertical portion, while the 'ring' portion is effectively only top loading to achieve resonance. The spacing between the ring portion and the ground plane versus wavelength is too small to permit radiation, and acts like a single wire transmission line over ground plane, in which the image of the wire forms the second conductor.

Dave is also correct in saying the roof portions would need to be secured together electrically for it to work as a ground plane, because currents induced must have a complete path to permit flow.

First time I've seen you on the NG Ken, good to hear from you. See you in DeLand when we return in November.

Walt

521. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399EAE85.DF81CF53@oio.net>
Source record: 182283

Roger,
If you would change the 'acetone' to 'acidic acid', I would
agree with you (but never had a circuit 'fall apart' yet).
I also found a substitute if you can't find silicon. I was
away from home and needed to seal a center connector on a dipole.
Went to Wal Mart, no silicon like I wanted. Was wandering through
the sporting goods section and found some stuff called "Shoe Goo".
I won't try to explain it, go read the instructions on the tube,
then you try explaining it (LOL). Anyway, tried it, and it does
work. It gets brittle after abotu a year, so it isn't a permanent
seal (but when you think about it, that's not a bad idea). It
also comes in handy for a bunch of other things......FWIW.
'Doc

522. Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Brad <bdstrau@attglobal.net>
Message-ID: <399eb12f_2@news1.prserv.net>
Source record: 182284

Center-loaded dipole question.

I want to make a homebrew center-loaded dipole, but I'm a new ham and I'm not sure my idea is technically sound.

My plan is to begin with a 50-ohm coax fed through an SWR meter and into a 1:1 balun at the center of the dipole. From each side of the balum I would connect a tapped coil. And out of the far end of each coil would be a length of wire to serve as the dipole radiators. Then, through simple trial and error, I would adjust the taps (same on both coils) until I get a good SWR reading for the desired band.

Does this make sense, or am I just not getting it? Am I correct in believing that I need no capacitance in the antenna, only inductance? I can't find this scheme in any antenna books, but base-loaded ground planes appear quite often.

Thanks and 73,
-Brad (kc6tue)

523. Re: Sheet of metal as a ground plane for an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399EAFA9.A787E60E@oio.net>
Source record: 182285
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

jason_hsu,
Your still going to need a counterpoise of some type. A
metal plate just isn't practical on HF, size is the problem.
A counterpoise or two made from wire with a 'neutral' color,
might still be your best bet. Good luck....
'Doc

524. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399EB03B.550D8FAA@oio.net>
Source record: 182286

Set'em up Joe,
Careful there Joe! Just like the 'live' ones,
one 'sharp' answer, and they'll 'blow up' on you!
'Doc

525. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399EB296.ADBD6A60@oio.net>
Source record: 182287

Roger,
Without doing any calculations I can tell you that your system
is not going to be to 'Rohn' specifications. The primary reason
being the guy posts. Two yards of concrete for the base is marginal.
(I wouldn't think it would be but it is.) It depends on the make up
of the soil in your area, the amount of concrete used, and the shape
of the concrete pier. Not being an engineer, my advice isn't the
'best', but 'Rohn' might help you (if you can get them to answer at
all). My point of contact with them was Jeff Moran.
'Doc

526. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399EB401.B4C620F8@oio.net>
Source record: 182288

Evan,
All I can say is that our loops are not the same. Empirically,
what I said does hold true for my loop. The difference in signals
isn't much at times, but it's there.
'Doc

527. Re: Comparison Review of the k2 fractal flyer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819123028.11263.00000295@ng-fa1.aol.com>
Source record: 182289

nice comparison ot thw two antennas

>Hi All,
>
>My page at:
>http://www.qsl.net/~kb7qhc/antenna/fractal/n1ir/k2/index.htm
>has been updated to follow the interests of the audience that wants to see a
small antenna
>with positive qualities that counter balance the over-all deafness.
>
>I have added a comparison design I call the "H Flyer." This is an extremely
simple
>antenna having none of the twists, turns, and kinks required to fractalize a
solution for
>the sake of fractalizing it. Three (3) wires (or five if you download the
EZNEC file)
>rather than the Forty (40) or so for the k2. The name describes the shape
which is a
>sloping, ends loaded dipole (or side-ways, sloping H).
>
>So What?
>
>The H Flyer conforms to the specifications for the k2 within a fraction of a
dB or exceeds
>the k2 considerably. Yes it has F/B, perhaps a dB lower than the k2. It has
a relatively
>good 10 degree radiation component (and slightly better than the k2 over-all).
>
>So, how do we find those qualities of a fractal comparing to the H Flyer?
Wide band
>tuning. Well here the H Flyer is easily twice the bandwidth. Small size.
Actually, the
>H Flyer isn't as tall, merely elevated to roughly the same height - the k2 is
the taller
>of the two (which gives it a fraction of a dB more gain at 10 deg).
>
>With the interest of the community in low, small antennas that rely on ground
to optimize
>key characteristics, I would propose that the "H Flyer" makes for a suitable
and sometimes
>superior substitute of the k2. It is far easier to construct than the k2, and
displays
>less sensitivity to minor changes in relation to earth than the k2 (although
it remains

>relatively high). It is far more tolerant of matching. For those who wish to
experiment,
>it appears that this design's characteristics are independent of the source's
position
>along the slope of the vertical section. For the sake of simplicity, I chose
the drive
>point at the lower end of the vertical section.
>
>73's
>Richard Clark, KB7QHC
>
>
>
>
>

528. Re: Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819123254.11263.00000297@ng-fa1.aol.com>
Source record: 182290

you are on the right path
try it first before following others

>Center-loaded dipole question.
>
>I want to make a homebrew center-loaded dipole, but I'm a new ham and I'm
>not sure my idea is technically sound.
>
>My plan is to begin with a 50-ohm coax fed through an SWR meter and into a
>1:1 balun at the center of the dipole. From each side of the balum I would
>connect a tapped coil. And out of the far end of each coil would be a
>length of wire to serve as the dipole radiators. Then, through simple trial
>and error, I would adjust the taps (same on both coils) until I get a good
>SWR reading for the desired band.
>
>Does this make sense, or am I just not getting it? Am I correct in
>believing that I need no capacitance in the antenna, only inductance? I
>can't find this scheme in any antenna books, but base-loaded ground planes
>appear quite often.
>
>Thanks and 73,
> -Brad (kc6tue)
>
>
>
>
>
>
>
>
>
>

529. Re: HF loop antenna close to ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819123452.11263.00000298@ng-fa1.aol.com>
Source record: 182291

good advice

>Hi, OM:
>
>If all of the pieces of the aluminum are *well-connected* to each other,
>you'd probably do better using the roof as a groundplane for a
>trap-vertical. I have done this in the past, after bonding the pieces on
>an outbuilding roof.
>
>The ddrr (directional-discontinuity-ring-radiator?) isn't a good antenna
>unless it's scrupulously constructed with *large*-diameter stovepipe(!) ...
>do a google.com search on 'ddrr antenna' for a VE2something who really did
>the ddrr up brown; the site has impressive pix, and the chap may respond to
>email. Iirc, he phased 4 of them in some sort of array.
>
>Lotsa luck what ever you do ... 73
>
>Dave, K3BHJ
>
>
>
>
>
>
>
>

530. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819123818.11263.00000299@ng-fa1.aol.com>
Source record: 182292

bad advise

>NC:
>
>What *would* lead in some way to your contributing to a new chapter in the
>history of this NG, by simply leaving it?
>
>Would you consider entering democrat politics, where your desires to
>demonize the holders of opposing opinions, and your tiresome bloviations
>about vast conspiracies, lawsuits, and victimhood, would probably find an
>eager
>audience?
>
>Can we help you find your way out, pls?
>
>Why would a person such as yourself want to subject himself to the milieu
>you describe?
>
>Take your own excellent advice.
>
>Stop reading the materials here.
>
>Stop posting to the NG here.
>
>Go away to the dot-com you have created and stay there.
>
>We here have enough intestinal and other fortitude to do without your
>presence on the NG.
>
>We do not wish you ill.
>
>We wish nothing more than for you to get out, stay out, and don't come back.
>
>Is there any part of 'get out, stay out, and don't come back' that you do
>not understand?
>
>If so, ask your attorney to explain the phrase.
>
>Take fill dirt, the Zero Knowledge Transferable character, with you.
>
>K3BHJ
>***
>
>NC bloviated, in part, somewhere, about this NG:

>
>Copyright violation; impersonation; libel;prevarication about proper
>copyright
>and pending patent notification; misleading and incorrect assessment; and so
>on
>will NOT lead in any way to my leaving this NG.
>
>If you do not wish to read the materials, then don't.
>
>What has resulted from this abuse is a new and global interest in exactly
>the
>kind of mischief that has been promulgated here. I will actively assist any
>and
>all scholars, legal types, and press who want to investigate this active
>attempt to destroy a new technology and the inventor and company that go
>with
>it.
>
>To my knowledge, this is a new chapter in the history of the internet.
>
>NC
>
>
>
>
>
>
>
>
>
>

531. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819124206.11263.00000300@ng-fa1.aol.com>
Source record: 182293

so
this is a confession?

>
>But that gives no one the right to use whatever steps--such as:
>impersonation;
>accusations of fraud; accusations of mental illness; accusations of bizarre
>sexual engagement; copyright infringement; inaccurate and deliberately
>misleading data comparisons; threats of getting someone fired; and on and on
>(just of the few of the issues in the last month) to IMPOSE one's will of
>'getting someone off the newsgroup'.
>
>I am here to enjoy myself and provide accurate and cogent info. As long as I
>am
>capable of this, I am happy to be here.
>
>Hope this helps.
>
>73,
>Chip N1IR
>
>
>
>
>
>

532. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399E9F17.5E81@pacbell.net>
Source record: 182294

Tom W8JI wrote:
>
> On Sat, 19 Aug 2000 03:10:38 GMT, kk5yy@arrl.net (Gerald Schmitt)
> wrote:
>
> >A straw pole of local PhDs concluded that you are an embarassment and
> >they wish you would stop using the title.
> >>
> >Love Jerry
>
> Hi Jerry,
>
> If we would all ignore Chip, his posts would probably get more and
> more outlandish. Eventually, when he failed to get attention, he would
> go somewhere else or find some other outlet.
>
> I think what we all miss (I'm guilty of this also), is he enjoys the
> attention. It doesn't matter at all if it is bad attention, or if you
> prove him to a fool, he just loves the attention.
>
> The worse punishment for Chip would be to ignore him, and act like he
> isn't even there. No matter what he says, or what he does.
>
> He is a troll, who enjoys being chased and called a troll.
>
> 73 Tom

Tom is absolutely right. The only way to get someone like Chip
off the newsgroup is to totally ignore him. Of course, it may take
some superhuman discipline to keep from responding to his
puerile, irritating, little posts, and people should expect a
rising level of desperation on his part as his trolls are
increasingly ignored, but, it's the only truly effective
way to deal with him.

Tom Donaly KA6RUH

533. Re: Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <399EADA5.7DC0C9AA@GTE.net>
Source record: 182295

Brad wrote:

> Center-loaded dipole question.
>
> I want to make a homebrew center-loaded dipole, but I'm a new ham and I'm
> not sure my idea is technically sound.
>
> My plan is to begin with a 50-ohm coax fed through an SWR meter and into a
> 1:1 balun at the center of the dipole. From each side of the balum I would
> connect a tapped coil. And out of the far end of each coil would be a
> length of wire to serve as the dipole radiators. Then, through simple trial
> and error, I would adjust the taps (same on both coils) until I get a good
> SWR reading for the desired band.
>
> Does this make sense, or am I just not getting it? Am I correct in
> believing that I need no capacitance in the antenna, only inductance? I
> can't find this scheme in any antenna books, but base-loaded ground planes
> appear quite often.
>
> Thanks and 73,
> -Brad (kc6tue)

Hi Brad,
You have 2 variables here- resonance of the antenna and feedpoint resistance- simply tapping the coil for feed R will not resonate the antenna. So you need to find the correct antenna length in combination w/ the inductance to resonate the antenna- then locate taps either side of center for 50 Ohms. Finding resonance is easy w/ a grid dip meter or noise bridge,

Dale W4OP

534. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819125611.11263.00000302@ng-fa1.aol.com>
Source record: 182296

sounds like ur tuning the tower for
the ultimate
thwang!

whats the q of this load?

>OK, for the engineers, or mathematically inclined...
>
>I've installed a Rohn 45G, but due to a driveway I had to raise the guy
>anchor point 10 feet and do it on all three anchors to keep the system
>symmetrical as well as out of the way.
>
>I did this by using five inch diameter heavy wall steel pipe which sets in
>two yards of concrete, the base of which is six feet below grade. The
>anchors are out 80% of the tower height., or roughly 80 feet. (79 is you
>want to be specific)
>
>The guys are tensioned to 10% of their breaking strength or 400# for all
>guys on the bottom two tier (31 and 65 feet elevation) and 600# for the top
>tier (96 foot elevation).
>
>Now, to those who have installed towers up to 50, or even 60 feet, this
>probably sounds like a rather sound guying of the installation and they are
>sturdy...Unfortunately at 90# per section of tower and all that guy tension
>they are also just a wee bit flexible as are freshly installed Phillistrand
>guys. Not enough to really notice while climbing the tower, but (without
>taking the time to calculate the horizontal pull 10 feet up, on the 300#
>pipes set in over 11,000# of concrete) that horizontal moment is substantial
>and leads to a tiny bit of flexing. (it don't take much)
>
>If you place a hand on any of the guy anchor posts you can feel every touch
>of the wrench to bolt, or every step from tower cross rung to rung.
>
>Most of the stretch, what little there was has pretty much been eliminated
>from the bottom tier of guys. The second tier is getting better.
>
>The top guys will come in steep enough that they can be anchored right at
>the top of the concrete pier, or base of the five inch pipe. It will have
>to be offset far enough that the guy lines will not rub where they cross.
>
>As the goal is for three independently controlled arrays on the tower, the
>flex must be kept down to an absolute minimum. The HF array at the top of
>the tower will be roughly 18 sq. ft (and near 200#), with a 6 sq. ft antenna
>about 12 feet above that ant about a 4 sq. foot array 12 feet above that.
>The stretch in the Kevlar (Philistrand will pretty much be eliminated after

>a couple of weeks at tension...Actually they are retensioned at roughly
>three, seven, and 14 days after the initial tensioning at installation.
>
>
>The five inch diameter pipe is a more interesting case as tightening the guy
>lines properly puts the pipe/system almost "in tune". Over tensioning can
>make for a very interesting situation. Similar situations can be found it
>steel guys are not properly positioned and tensioned.
>
>Here, "I'm thinking" of changing both the resonant point and rigidity of the
>pipes by possibly :
>
>1. inserting three re-rod and pouring a rich mixture of concrete into the
>pipe.
>2. Inserting an I-beam that will just fit and again pouring in concrete, or
>3. Welding I-beam to the front of the post to reinforce it and again filling
>the pipe with concrete.
>4. Respace and add a 4th tier of guys?
>
>Concrete by itself can be very flexible.
>I have a 3" pipe set in the ground to support an 11 foot satellite dish for
>tuning. With the weight of the dish that 3" post will oscillate at a rate
>between one and two seconds per cycle and at an amplitude of about a 4"
>swing at a height of 6'.
>
>The system will work as is, but I want to make the tower as rigid as
>practical.
>I'd hate to find that a given load and wind would hit a resonant point.
>
>Any suggestions?
>
>Roger Halstead (K8RI) www.RogerHalstead.com
>N833R World's Oldest Debonair? s# CD-2
>
>
>
>
>
>
>
>
>
>

535. Re: Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <lUyn5.6238$uX.12090@newsfeed.slurp.net>
Source record: 182297

Did something similar, with two 8-ft CB whips and a piece of 6-in diameter white PVC pipe, on 40M, and its final form was with a single coil in the center, and the feedline connected to what is known as a 'link' of a few turns of insulated wire wrapped around the center of the coil.

Nothing is critical, such as wire size, just so it handles powers and physical strains involved. As a starting point, make the length of wire in the coil about 10-20% longer than its equivalent straight dipole length that it replaces. For example, I started with about 60ft of wire wound into a coil about 4in in diameter iirc, with the thing I made above. If you have the coil on a form, you can spread or contract the length of the coil while adjusting stuff as in the next paragraph.

The number of turns and spacing in the link (start with 4) can be adjusted for usable swr, once the resonant point of the antenna is found by adjusting the number of turns and turn-spacing in the loading coil.

Having said 'nothing is critical', I take it back. Your patience and perseverance is critical <BG> They will be tested!

Gimme a shout if you need additional consulting.

73 and GL,

Dave, K3BHJ

536. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819125920.11263.00000303@ng-fa1.aol.com>
Source record: 182298

give it a try
before
others advice

>Greetings,
>
> The 2000 ed. of The A.R.R.L. Hndbk. lists a project to
>throw up a 1 wavelength horizontal loop they call, " The Loop
>Skywire." It's cheap, I've got the wire (500ft. roll of 14AWG ins.),
>and the trees to throw up it up as a lop-sided horizontal Quad, in
>effect. So ,okay go for it.
>
> What I'd like is feedback on a couple of questions. First
>is insulators. I can scavenge two egg-types but getting more
>means basically a 2 hr. expedition and more money. They're not
>a Home Depot / RS item unless I but another RS SW Ant. Kit.
>Since the wire is insulated, how important are they?? Just to
>counteract line tension by swaying trees?? Maybe I'd rather just
>take my chances if that's true.
>
> Secondly, this loop certainly gets a glowing review from
>the Hndbk. Do you agree with it? Experience with it? To compare,
>currently I'm using a 66ft. random wire 20ft up and I'm using it for
>my reciever (RS DX-392). So this loop is for RX only. Not sure
>how much higher I can get with the loop (especially if I have to
>climb up and tie off insulators). Which is another issue: Even if
>insulators are worth it, would it be better to go for max. alttitude
>of the circuit and just forgo the insulators? I have at least two
>possible "routes" to use; the first is a shade over 40M wavelength,
>the 2nd a shade over 80M wavelength. I wanted to go with the
>80M for broader band coverage. I'm a newly licensed ham and
>don't have more than Tech. privs. right now so this is just to make
>for some better DX'ing on my reciever. Seems easy and cheap,
>what do you think?
>
> THX,
>
> Andrew
> KG4JBM
>
>
>
>
>

>

537. Re: Experience with MFJ-1798 multiband vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819130409.11263.00000305@ng-fa1.aol.com>
Source record: 182299

yes, yes it is!
keep walking toward the light

>Hi Group,
>
>I'm contemplating the purchase of an MFJ-1798.
>Is it really all things to all men?
>
>--Mark Barton WA6FTU
>
>
>
>
>
>

538. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819130459.11263.00000306@ng-fa1.aol.com>
Source record: 182300

bored huh?

>A lot of nice posts about Antennas.
>
>No bickering, no personal attacks, no threats of law suits.
>
>Am I on the right news group or did Chips computer blow up ?
>
>73 Al Lowe N0IMW
>
>
>
>
>
>

539. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819130723.11263.00000307@ng-fa1.aol.com>
Source record: 182301

you sure
you didnt set your
watch filter instead?

>CW wrote:
>>
>> Chip is now resting comfortably in my kill file. That did it for me.
>> --
>> CW
>> KC7NOD
>>
>
>
>Hello, CW,
>
>Gee, how did you set up your kill file? Several months back I set up a
>kill file for "Frac", "fractal", "Chip", "N1IR", etc., etc., and
>nowadays that doesn't even come close to getting rid of all the garbage.
>The threads are too varied and too insidious now to handle with a simple
>kill file. I long for the old days when this was a really great
>newsgroup.
>
>In July, I was off for a couple of weeks or so because of work and when
>I got around to checking the newsgroup again, out of 1850 unread
>messages some 59% were of the bickering, abusive kind (you know the
>type) going to or from fractenna (I actually counted them). Can you
>believe that? At one point in July, 2000, there were eight, separate,
>endless, simultaneous threads on the matter. For most of the month,
>there were at least six. Unbelieveable. It's been like this since almost
>the beginning of the year.
>
>I used to get a lot out of this newsgroup. It's not nearly as useful and
>educational to me as it once was, because I think people who have
>something to say are simply getting crowded out. It's like trying to get
>a word in edgewise with a gasbag at a party. I can't believe we have to
>put up with this, but, after all, I guess there is a First Amendment.
>
>I also realize I've just added to the problem, but if I were
>face-to-face with you I'd still say what I just said. As Mr. Sabin
>sometimes says, I'm not interested in any replies to this post and I
>don't wish to further my comments on this subject. Please don't bother
>replying to my rhetorical question.
>
>

>Disgustedly,
>
>Al W6LX
>
>
>
>
>
>

540. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819131151.11263.00000308@ng-fa1.aol.com>
Source record: 182302

based on the comments?

which one of yours upset him?

is he watching right now?

>I want to make it clear that efforts to maliciously libel me and my corporate
>firm have recently produced a query from a major telecom company, in which
>one
>of their chief engineers stated he will not have anything to do with the
>technology--based on these comments.
>
>I will state clearly and emphatically that this is compelling evidence for
>libel and likely lost income based on such NG posts.
>
>The situation is very serious, and in my opinion, at this point deserves
>media
>attention on how the internet is being used to kill companies.
>
>I would like to remind those who libel that ATT had one such person in
>Houston
>put in jail a few months ago for such manipulation. The precedent is there.
>
>Nathan Cohen, Ph.D.
>
>
>
>
>
>
>

541. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819131455.11263.00000309@ng-fa1.aol.com>
Source record: 182303

we can get more signatures

hope this helps!

>>they wish you would stop using the title.
>>>
>>Love Jerry
>>
>Please provide a signed affidavit from them in this regard. It will
>especially
>be of aid in the ongoing lawsuit against Thomas Rauch.
>
>Thanks!
>
>Chip N1IR
>
>
>
>
>

542. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819131839.11263.00000310@ng-fa1.aol.com>
Source record: 182304

another confession

>I think what we all miss (I'm guilty of this also), is he enjoys the
>attention. It doesn't matter at all if it is bad attention, or if you
>prove him to a fool, he just loves the attention.
>
>The worse punishment for Chip would be to ignore him, and act like he
>isn't even there. No matter what he says, or what he does.
>
>He is a troll, who enjoys being chased and called a troll.
>
>73 Tom
>
>
>
>
>
>

543. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819132118.11263.00000311@ng-fa1.aol.com>
Source record: 182305

you expect expert advise over the net?

you cant stand the expert you got now

>Bill Aycock wrote:
>>
>> Al- You are SO right- nice!
>>
>> His computer is still functioning- there is a mini love fest going on on
>> the private list, interspersed with notice that he cant talk about the
>> two more patents he expects out soon.
>
>Has there been any cogent explanation of the claims? Obviously there
>won't (can't) be any significant critique but I wonder if he's making
>any attempt to actually describe (as a teacher) what the patent is all
>about. I would be particularly interested in his explanation of how
>Krauss et all managed to botch the theory of small loops.
>
>Of course that would be helpful.
>
>bart
>wb6hqk
>
>
>
>
>
>
>

544. Re: Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8nmffr$p3s$1@neptunium.btinternet.com>
Source record: 182306

Hi Brad,

For a complete design of a centre-loaded dipole, including
the number of turns on the coil, various feeding methods and
radiating efficiency, download program MIDLOAD from my
website.

Best method of feeding is via a link-coupling over the
loading coil to a balanced or coax feedline of any impedance
you fancy.

Download program in a few seconds. One file only. Run
immediately. Input data on a 'what-if?' basis.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp
----

545. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: n4jzh@knology.net
Message-ID: <399ec116.64973851@news.knology.net>
Source record: 182307

On Sat, 19 Aug 2000 14:57:50 GMT, Brian Hemmis <K3USC@att.net> wrote:

>you want an INFLATIBLE DOLL ??
>
>
Brian,
I think thats what he is asking for! ROTFLMAO!
Talk about Fetish
73 Brian from
N4JZH Donnie
Hows that Icom Gear I Sold You Doing For You?

546. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <majspssoekjjhufs68turjl2pvfj9ocv65@4ax.com>
Source record: 182308

"Dan K Nelson" <w6dkn@qsl.net>
shared these priceless pearls of wisdom:

->Pardon me for stating the facts, but the losses are real, and the
->performance difference between RG-58 and LMR-400 at 150 mhz. is obvious.

Christ. Another theory ivory tower geek.

Run RG-58 and use BNC connectors like all the rest of the fleet uses. Use clear silicone seal (even if it smells like vinegar) on the connectors, shrink sleeving over the connectors and the goop, and enjoy your boat.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

547. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819132403.11263.00000312@ng-fa1.aol.com>
Source record: 182309

you must be bored too

>>Insulters can order a copy for $3.00 from the Patent and Trademark
>>Office, http://uspto.gov.
>>
>>Roy Lewallen, W7EL
>>
>>Bill Aycock wrote:
>>>
>>> Al- You are SO right- nice!
>>>
>>> His computer is still functioning- there is a mini love fest going on
>>on
>>> the private list, interspersed with notice that he cant talk about the
>>> two more patents he expects out soon.
>>>
>>> He has also offered to make copies of THE PATENT for anyone who sends
>>in
>>> a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
>>> qualify. Guess I'm out.
>>>
>>> He will be busy till after Labor day, so copies will be delayed.
>>>
>>> Bill- W4BSG
>
>
>Shhh, Lets all be real quite, maybe we won't wake him.
>The last thing I want to know, is anything about his patents.
>
>I have some antenna questions I would like to ask the news group,
>but I need to do more research first. This would sure be a good time to ask.
>
>Oh well.
>
>73 Al Lowe N0IMW
>
>
>
>
>
>
>

548. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819132505.11263.00000313@ng-fa1.aol.com>
Source record: 182310

whose wasting bandwidth?

>> >Insulters can order a copy for $3.00 from the Patent and Trademark
>> >Office, http://uspto.gov.
>> >
>> >Roy Lewallen, W7EL
>> >
>> >Bill Aycock wrote:
>> >>
>> >> Al- You are SO right- nice!
>> >>
>> >> His computer is still functioning- there is a mini love fest going on
>> >on
>> >> the private list, interspersed with notice that he cant talk about the
>> >> two more patents he expects out soon.
>> >>
>> >> He has also offered to make copies of THE PATENT for anyone who sends
>> >in
>> >> a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
>> >> qualify. Guess I'm out.
>> >>
>> >> He will be busy till after Labor day, so copies will be delayed.
>> >>
>> >> Bill- W4BSG
>>
>>
>> Shhh, Lets all be real quite, maybe we won't wake him.
>> The last thing I want to know, is anything about his patents.
>>
>> I have some antenna questions I would like to ask the news group,
>> but I need to do more research first. This would sure be a good time to
>> ask.
>> Oh well.
>>
>> 73 Al Lowe N0IMW
>>
>
>
>
>
>If so, why are you wasting time and bandwidth talking about him?
>
>
>

>
>
>

549. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819132637.11263.00000314@ng-fa1.aol.com>
Source record: 182311

the clockwatcher

>On 18 Aug 2000 15:29:41 GMT, arrow146@aol.com (Arrow146) wrote:
>
>>A lot of nice posts about Antennas.
>>No bickering, no personal attacks, no threats of law suits.
>
>Hi Al,
>
>Aug 15, full moon.
>Aug 16, waning moon.
>Aug 17, more calm
>Aug 29, new moon and increased activity.
>Sept 13, this NG will be an absolute mess.
>Sept 14, waning moon
>Sept 15, more calm
>
>etc. etc.
>
>just like a clock.
>
>
>
>
>
>

550. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819132854.11263.00000315@ng-fa1.aol.com>
Source record: 182312

just damned lucky
cause your next!

>He'll be back. Actually, I don't mind him so much, because, as long
>as he's around, I'm not the worst poster on the newsgroup.
>
>Tom Donaly KA6RUH
>
>
>
>
>
>
>
>

551. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <399EC4B2.EDEBC2E@earthlink.net>
Source record: 182313

> firm have recently produced a query from a major telecom company, in which one
> of their chief engineers stated he will not have anything to do with the
> technology--based on these comments.
>
Let me get this right, A major telecom firm contacted him to tell him
that one of their chief engineers wouldn't have anything to do with the
technology? THAT is strange!

Dave, Kc6old

552. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819133418.11263.00000318@ng-fa1.aol.com>
Source record: 182314

good answer

>Hi, Art:
>
>Re your query:
>
>Mosley calls it 'the Classic feed', or something like that. They had 2
>pieces of '8U center-conductor-with-insulation-but-no-braid connected as a
>sorta-dipole *inside* the halves of the DEs of some of their antennas. No
>mechanical connection.
>
>Fwiw, I always got good performance from the S402 -- its c-l inductors were
>on big ceramic forms, and if you hammered plastic blocks inside the
>element-to-boom tube centers and drilled them for the u-bolts, the elements
>stayed put ... but that's another tale. If I ever catch up with the
>economy I'll build a chinese copy if I can't find one to buy.
>
>Hth. 73, Dave, K3BHJ
>
>
>
>
>
>
>
>

553. Re: Online Homebrew Aerial Projects

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819134213.11263.00000320@ng-fa1.aol.com>
Source record: 182315

nice page
good photo

>Hi. I have just posted my latest aerial project on my website.
>It is the most simple , effective antenna system possible for 1.8 to 30 MHz
>use , and is suitable for tx as well as rx.
>The system consists of an L Match antenna Tuner and 132 feet of wire.
>Details , circuit and construction pics at my website. Find AERIALS &
>ANTENNAS then click the "L Match Basic A.T.U." icon!
>Have fun and enjoy !! :)
>bri g0ier
>
>http://www.bri1.btinternet.co.uk
>
>
>
>
>
>
>
>
>

554. Re: Returned mail: see transcript for details

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819134356.11263.00000321@ng-fa1.aol.com>
Source record: 182316

more confessions

> Rob:
>
> This is bizarre. No

and so on

555. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <399ECAA1.FB1F7506@haertig.com>
Source record: 182317

A 3 db loss of signal in VHF FM communications systems is generally not noticeable and considered acceptable - it is swamped out by the spatial and temporal variability of the signal that is inherent in VHF (and UHF) propagation. Many commercial systems actually have much higher loss.

In most marine environments the most important design criterion is robustness and reliability. For relatively short and well protected runs RG-58 works fine. I would avoid cables with air dielectric like 9913 because of their susceptibility to flooding if the connector weatherproofing fails or the outer jacket gets punctured. A closed cell foam or polyethylene dielectric allows for the possibility of emergency repair if a connector gets waterlogged.

If solid outer conductor cables (such as Heliax) are used, a good deal of caution needs to be exercised in mechanical installation to prevent repeated flexure. These cables will eventually work harden and break.

As to connector weatherproofing, I have started using the 3M cold shrink products. They are a snap to install, easy to remove, don't leave a gummy mess on the connector, and can be installed over a wide temperature range. They aren't cheap, however. So far I have not had any failures. They are widely used in direct bury electrical splices.

One antenna manufacturer recommends flooding outdoor Type N connectors with petroleum jelly before connecting. I admit this makes me a bit nervous, but I haven't seen any failures yet in installations up to 250 watts VHF after several years. It's an interesting idea. Does anyone else have any experience with this?

Gray

>
> "Dan K Nelson" <w6dkn@qsl.net>
> shared these priceless pearls of wisdom:
>
> ->
> ->RG-58 has about 5 db loss per 100 foot at 150 mhz. Even a 50 foot run will
> ->result in a loss of about half of the power fed into it, as well as half of
> ->the received signal strength. I would think that a 25 watt marine radio on
> ->the open waters would opt for max range and reliability, therefore he would
> ->probably want to use an LMR-400 or 9913 type cable to keep feedline losses
> ->at a minimum. If so, a UHF or type N connector would be appropriate.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.

820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

556. Re: "Flingshot" Antenna Tool

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000819134845.11263.00000322@ng-fa1.aol.com>
Source record: 182318

what is game tracker?

>Unless one is putting up a lot of antennas, a spool of Game Tracker is all
>you
>need in lieu of the spinning reel.
>
>
>
>
>
>

557. Re: Wanted: Alliance HD 73 rotor control box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Morning Cloud and Standing Stone <macadi@qn.net>
Message-ID: <399e3415@news.qn.net>
Source record: 182350

For Alliance Rotors & parts, contact Norm's Rotor Service at:

http://web.compusnet.com/shiacawn/rotors/index.htm

Michael, N8EYE.

558. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8nld1e$3ia$1@uranium.btinternet.com>
Source record: 182351

Mike,

The size (uH) of a loading coil to 'shorten' an antenna
depends, in order of importance, on

(1) Frequency.

(2) The overall conductor length or height.

(3) The location of the coil along the length.

(4) The length of the coil itself.

(5) The diameter of the conductor beyond the coil.

(6) The diameter of the conductor before the coil.

(7) To a small extent, coil diameter.

Any computer program which ignores conductor diameters may
be useful but will be inaccurate. There is also the matter
of designing the coil, number of turns, wire gage, etc., to
meet inductance and efficiency requirements.

The location of the coil affects both radiation and
feedpoint resistances. It also affects radiating efficiency.
As the coil(s) are moved outwards from the feedpoint the
antenna radiation resistance increases, the required
inductance increases, but for a given coil Q so does the
coil's loss resistance. For a coils overall dimensions
which control its Q there is a location at which radiating
efficiency is maximised.

However, the location of the coil(s) is not critical. About
3/5ths of the way from feedpoint to the end is as good as
any. But whatever means of determining coil inductance is
used it will always be necessary to allow for a little
trimming of the end lengths because height above ground and
adjacency of the mast, tower, guys, has some effect.

Download program VERTLOAD from my website. By connecting a
pair of verticals back-to-back, setting the ground loss to
zero, the program can be used to design a loaded dipole
complete with number of turns on the coil. Feedpoint
impedance is exactly twice that of a loaded vertical mounted
above a lossless ground plane.

Regards from Reg, G4FGQ

For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

<w4hij@my-deja.com> wrote in message
news:8nk82spjp1@nnrp1.deja.com...
> Recently I set out to build a "rotatable dipole" for 20
meters. It
> seemed the best way to get coverage in all directions as
well as
> realize a slight amount of gain and some directivity. The
first problem
> was that I did not have the turning radius for a full size
antenna so I
> used a program I got off the web somewhere (lost the url)
> called "reducer" which gave me the data I needed to reduce
the antenna
> length by using loading coils. The antenna is about 60% in
size, right
> at about 20 feet long and the coils are 1 and a half
inches in diameter
> with 22 and a half turns each for a load inductance of
6.59 uh. All of
> this is per the calculations of the reduction program. The
problem is
> the antenna will not match! I cannot get any reasonable
SWR reading or
> the thing to take any power at all. No amount of pruning
or lengthening
> accomplishes anything. I have always been able to get
dipoles to take
> power before just by simple pruning. I am not a novice at
building
> antennas but this is my first experience with loading
coils. Am I
> missing something? Perhaps I need some type of matching
circuit at the
> feedpoint...the reducer did not specify this though. Any
of you antenna
> whiz kids out there got any ideas? I am completetely
frustrated. By the
> way I did check the coax for shorts and open conductors so
that is
> ruled out.
> Thanks for any help...
> 73, Michael W4HIJ
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

559. FM Antenna Test Results (for those who're curious in a technical sense)...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "MonsterFM.com" <engineering@MonsterFM.com>
Message-ID: <8nlejv$3si$1@nnrp1.deja.com>
Source record: 182352

We've constructed and tested several different models of various FM
broadcast antenna elements.
The results of these tests, as well as our conclusions, can be found
at http://MonsterFM.com/engineering/fmant.html
By the way, these are true tests (as carried out with a true and
recently calibrated FIM, a spectrum analyzer, a Boonton "cold bridge",
and a Bird watt meter with a dummy load for calibration purposes...
This should alleviate ALL doubt concerning the best mode of LPFM signal
polarization.

--
Terry Keith Hammond
President/Chief Engineer

Broadcast Services
P.O. Box 155
Mount Vernon, Texas 75457

http://MonsterFM.com

(903) 562-1978

The radio business is a cruel and shallow money trench, a long plastic
hallway where thieves and pimps run free, and
good men die like dogs.
There's also a negative side."
- Hunter S. Thompson

Sent via Deja.com http://www.deja.com/
Before you buy.

560. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <4iSNDBAqhjn5Ewx5@ifwtech.demon.co.uk>
Source record: 182353

Terry Sanford wrote:
>A question re 'N' versus PL-259 connectors; based on information posted here.
>
>So 'N' connectors may be a problem at high powers?
>
>Reason I ask is that I was thinking about using 'N' type at base of my sailboat
>mast for marine VHF (max 25 watts) because it looked a lot more waterproof than
>the PL-259/SO-239 type. Whatever type I'll probably put it in a heat shrink
>sleeve anyway.
>
>Any advice would be appreciated.

No worries about power - problems begin at >1500W on 144MHz, or >1kW on 432. Even there, a lot of the problems are due to amateur assembly techniques and recycled connectors. N connections that have no imperfections and are left alone can be very reliable, even at these high power levels.

It's true that N is much more waterproof than 259/239 (well, that's not difficult) but I wouldn't trust a bare connector for marine use. Equally, I wouldn't trust a heat shrink sleeve on its own. US hams can advise you on the grades of Scotch/3M tape to use for multiple wrapping. Having done all that, you might as well use 259/239.

One hint - try to avoid outdoor connections between a coax plug (any type) and a flange socket on the side of a box. That's an almost impossible shape to wrap with tape. Putty materials such as Coax-Seal will work, but make a mess of the connectors. It's much better to replace the fixed socket with a short length of coax coming out through a proper waterproof cable gland, and terminate that coax in a line jack. The jack + plug combination is a much easier shape to waterproof with tape wraps.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

561. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <Jlrn5.1945$Pq3.375768@paloalto-snr1.gtei.net>
Source record: 182354

"Jim Weir" <jim@rst-engr.com> wrote in message
news:n5grps4lfi2jnb0h85hcarmf3v0tjeumr3@4ax.com...
> "Dan K Nelson" <w6dkn@qsl.net>
> shared these priceless pearls of wisdom:
>
> ->
> ->RG-58 has about 5 db loss per 100 foot at 150 mhz. Even a 50 foot run
will
> ->result in a loss of about half of the power fed into it, as well as half
of
> ->the received signal strength. I would think that a 25 watt marine radio
on
> ->the open waters would opt for max range and reliability, therefore he
would
> ->probably want to use an LMR-400 or 9913 type cable to keep feedline
losses
> ->at a minimum. If so, a UHF or type N connector would be appropriate.
>
> Y'all ever actually DONE one of these installations before, sir, or spent
a
> dozen or so years in the industry?
>
> When you have, please offer your "think" as opposed to standard practice.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

Pardon me for stating the facts, but the losses are real, and the
performance difference between RG-58 and LMR-400 at 150 mhz. is obvious. And
yes, I have installed several VHF radios, and I have measured the losses in
different types of feedlines. I may not have your "pedigree", but the
numbers don't lie. What do you want, max performance, or convenience of
installation? If "standard practice" is to use RG-58 for VHF installations,
then apparently the choice is for convenience of installation (unless you
are running a VERY short piece of feedline).

73 de W6DKN
(Sorry, no pedigrees, just common sense)

562. Tower Installers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: dandan2@home.com
Message-ID: <iDrn5.53760$eS6.879773@news1.rdc1.md.home.com>
Source record: 182355

Anyone know of a company/group that would install a short (25-30') tower for an individual? I want to raise my antenna off my roof, but don't want a monstor tower installation, and can't do the physical work necessary to do it myself. I live in the Wash DC suburbs.

dandan2@home.com

563. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399e6cae.6345875@news.akorn.net>
Source record: 182356

On Sat, 19 Aug 2000 03:17:44 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>
>I've even used the bathtub calk to seal coax to dipoles and it turned green
>where the stuff contacted the copper wire. Course out there and with heavy
>wire it's not really a problem, but finer wires, solder, and foil in
>contained spaces are bad news.

You never ever want to use vulcanizing sealers on lines, use something
that stays gooey.

The best compounds are things like GE dielectric compound silicon or
the stuff made for CATV systems.

Use a bit sparingly inside the connector on the threads. Use a heat
shrink with goo imbedded in the shrink, like CATV companies use
outdoors and underground.

If you don't use that, use good tape and cover it with vapor wrap or
auto body seam sealer that stays flexable.

73 Tom

564. Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <dwun5.6071$uX.10984@newsfeed.slurp.net>
Source record: 182357

NC:

What *would* lead in some way to your contributing to a new chapter in the history of this NG, by simply leaving it?

Would you consider entering democrat politics, where your desires to demonize the holders of opposing opinions, and your tiresome bloviations about vast conspiracies, lawsuits, and victimhood, would probably find an eager
audience?

Can we help you find your way out, pls?

Why would a person such as yourself want to subject himself to the milieu you describe?

Take your own excellent advice.

Stop reading the materials here.

Stop posting to the NG here.

Go away to the dot-com you have created and stay there.

We here have enough intestinal and other fortitude to do without your presence on the NG.

We do not wish you ill.

We wish nothing more than for you to get out, stay out, and don't come back.

Is there any part of 'get out, stay out, and don't come back' that you do not understand?

If so, ask your attorney to explain the phrase.

Take fill dirt, the Zero Knowledge Transferable character, with you.

K3BHJ
****

NC bloviated, in part, somewhere, about this NG:

Copyright violation; impersonation; libel;prevarication about proper copyright
and pending patent notification; misleading and incorrect assessment; and so on
will NOT lead in any way to my leaving this NG.

If you do not wish to read the materials, then don't.

What has resulted from this abuse is a new and global interest in exactly the
kind of mischief that has been promulgated here. I will actively assist any and
all scholars, legal types, and press who want to investigate this active
attempt to destroy a new technology and the inventor and company that go with
it.

To my knowledge, this is a new chapter in the history of the internet.

NC

565. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819082702.16319.00000386@ng-cr1.aol.com>
Source record: 182358

>NC:
>
>What *would* lead in some way to your contributing to a new chapter in the
>history of this NG, by simply leaving it?
>
>Would you consider entering democrat politics, where your desires to
>demonize the holders of opposing opinions, and your tiresome bloviations
>about vast conspiracies, lawsuits, and victimhood, would probably find an
>eager
>audience?
>
>Can we help you find your way out, pls?
>
>Why would a person such as yourself want to subject himself to the milieu
>you describe?
>
>Take your own excellent advice.
>
>Stop reading the materials here.
>
>Stop posting to the NG here.
>
>Go away to the dot-com you have created and stay there.
>
>We here have enough intestinal and other fortitude to do without your
>presence on the NG.
>
>We do not wish you ill.
>
>We wish nothing more than for you to get out, stay out, and don't come back.
>
>Is there any part of 'get out, stay out, and don't come back' that you do
>not understand?
>
>If so, ask your attorney to explain the phrase.
>
>Take fill dirt, the Zero Knowledge Transferable character, with you.
>
>K3BHJ
>**********
>
>NC bloviated, in part, somewhere, about this NG:
>
>Copyright violation; impersonation; libel;prevarication about proper

>copyright
>and pending patent notification; misleading and incorrect assessment; and so
>on
>will NOT lead in any way to my leaving this NG.
>
>If you do not wish to read the materials, then don't.
>
>What has resulted from this abuse is a new and global interest in exactly
>the
>kind of mischief that has been promulgated here. I will actively assist any
>and
>all scholars, legal types, and press who want to investigate this active
>attempt to destroy a new technology and the inventor and company that go
>with
>it.
>
>To my knowledge, this is a new chapter in the history of the internet.
>
>NC
Dave,

Life is an adaptive system.

Accept the fact that this is a big world, and not everyone will like you, and visa versa.

But that gives no one the right to use whatever steps--such as: impersonation; accusations of fraud; accusations of mental illness; accusations of bizarre sexual engagement; copyright infringement; inaccurate and deliberately misleading data comparisons; threats of getting someone fired; and on and on (just of the few of the issues in the last month) to IMPOSE one's will of 'getting someone off the newsgroup'.

I am here to enjoy myself and provide accurate and cogent info. As long as I am capable of this, I am happy to be here.

Hope this helps.

73,
Chip N1IR

566. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819083007.16319.00000388@ng-cr1.aol.com>
Source record: 182359

>A straw pole of local PhDs concluded that you are an embarassment and
>they wish you would stop using the title.
>>
>Love Jerry
>
Please provide a signed affidavit from them in this regard. It will especially
be of aid in the ongoing lawsuit against Thomas Rauch.

Thanks!

Chip N1IR

567. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Norman Litsche <nlitsche@worldnet.att.net>
Message-ID: <0evn5.2499$%O6.135691@bgtnsc05-news.ops.worldnet.att.net>
Source record: 182360

Wouldn't a plastic mother-in-law be more effective?

de Norm, KA2TYT

Murray Neece wrote in message <399E2CEA.53429245@qth.com>...
>Kmart does in Texas...but they call em OWLS....whooooooo whoooo
>
>Set'em up Joe wrote:
>
>> Man, are those pesky crows bugging me. Now in my
>> life the one thing that really scares the crap outta me is my wife.
>> My mother-in-Law tells me I should Thank God for her. I do.
>> I tell my Mother-in-Law that every morning, the first thing I do
>> is I roll over and see my wife asleep in the bed and say,
>>
>> " Jesus H. Christ. Thank God!!! "
>>
>> I figure a good plastic wife out back would really give those
>> crows second thoughts about landing on MY wire. Yep.
>> Does anybody know who sells those Plastic XYL's ???
>>
>> THX,
>>
>> Andrew
>> KG4JBM
>

568. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399e7e20.10811836@news.akorn.net>
Source record: 182361

On Sat, 19 Aug 2000 03:10:38 GMT, kk5yy@arrl.net (Gerald Schmitt)
wrote:

>A straw pole of local PhDs concluded that you are an embarassment and
>they wish you would stop using the title.
>>
>Love Jerry

Hi Jerry,

If we would all ignore Chip, his posts would probably get more and
more outlandish. Eventually, when he failed to get attention, he would
go somewhere else or find some other outlet.

I think what we all miss (I'm guilty of this also), is he enjoys the
attention. It doesn't matter at all if it is bad attention, or if you
prove him to a fool, he just loves the attention.

The worse punishment for Chip would be to ignore him, and act like he
isn't even there. No matter what he says, or what he does.

He is a troll, who enjoys being chased and called a troll.

73 Tom

569. Re: Fractenna's EGO is shamefully LAUGHABLE!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819084926.16331.00000361@ng-cr1.aol.com>
Source record: 182362

>Doesn't chirper know we're NOT impressed AT ALL by
>his delirious talk of patents. What an EGO. LOL
>

Actually, upon reviewing my comments I believe they are cogent and compelling.

When inaccuracies wrt my patent position arose I corrected.

I didn'y bring up the subject Cory. Al from the antenna company ARROW ANTENNAS did.

73,
Chip N1IR

570. Re: THANKS TO K1KW--Chuck O'Neal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000819085501.16331.00000362@ng-cr1.aol.com>
Source record: 182363

>
>This is something I am not proud of in your case,
>particularly considering your antics on this NG.
>I wish that I could say over the past 2 years of
>been reading this NG, I have learned something from you.
>I can not.
>Where the Hell did you get the EGO, poor
>behavior, and the multiple personalities? How did you
>turn into such a pompous ass? Perhaps you had
>better listen to the advice given to you on this
>NG by the many folks wiser than you ever will be.
>Oh, BTW, congratulations on the patent
>
>Hope this helps...
>
>Cordially,
>
>Chuck...K1KW

>
>This is something I am not proud of in your case,
>particularly considering your antics on this NG.
>I wish that I could say over the past 2 years of
>been reading this NG, I have learned something from you.
>I can not.
>Where the Hell did you get the EGO, poor
>behavior, and the multiple personalities? How did you
>turn into such a pompous ass? Perhaps you had
>better listen to the advice given to you on this
>NG by the many folks wiser than you ever will be.
>Oh, BTW, congratulations on the patent
>
>Hope this helps...
>
>Cordially,
>
>Chuck...K1KW

I am of the opinion that money, especially inherited money, brings out the quirkiness in some people: the right to express the bitterness in other people's accomplishments, the notion that 'my judgemental and pejorative opinion counts', and so on.

I have no idea if your inaccurate statements here are so motivated Chuck, but given the fond memories of your more youthful public personna, I hope not.

73
Chip N1IR

571. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <399e841a.33136249@nntp.mindspring.com>
Source record: 182364

On 19 Aug 2000 12:30:07 GMT, fractenna@aol.com (Fractenna) wrote:

>>A straw pole of local PhDs concluded that you are an embarassment and
>>they wish you would stop using the title.
>>>
>>Love Jerry
>>
>Please provide a signed affidavit from them in this regard. It will especially
>be of aid in the ongoing lawsuit against Thomas Rauch.
>
>Thanks!
>
>Chip N1IR

Well this logic escapes me. Your peers are disgusted with your
behavior and you are going to sue Rauch. Please explain this
one, your bizarre thinking is beyond me this time. Rouch doesn't
make you act like a jackass Nathan so he has no responsibility
for the attitude of other PhDs toward you.

Laughing and pointing

Jerry

572. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000819091555.07103.00000058@ng-fp1.aol.com>
Source record: 182365

>
>Life is an adaptive system.
>
>Accept the fact that this is a big world, and not everyone will like you, and
>visa versa.
>
>But that gives no one the right to use whatever steps--such as:
>impersonation;
>accusations of fraud; accusations of mental illness; accusations of bizarre
>sexual engagement; copyright infringement; inaccurate and deliberately
>misleading data comparisons; threats of getting someone fired; and on and on
>(just of the few of the issues in the last month) to IMPOSE one's will of
>'getting someone off the newsgroup'.
>
>I am here to enjoy myself and provide accurate and cogent info. As long as I
>am
>capable of this, I am happy to be here.
>
>Hope this helps.
>
>73,
>Chip N1IR
>
>

First he is scaring everyone with law suits and then he enjoys himself. Which
is it? Visa (sick:-) versa?

Lets adapt,
leave the genious here, let him communicate with himself and his
fracsonalities.
I invite all decent people to www.eHam.net and excellent
towertalk@contesting.com antenna reflector. eHam.net has room for articles,
equipment reviews etc.

I know this will help!

BUm

573. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3Svn5.6101$uX.11302@newsfeed.slurp.net>
Source record: 182366

NC's remarks demonstrating mastery-of-the-obvious SNIPPED

NC:

You're acting like a one-trick pony: more tiresome screed about conspiracy, victimhood, threats.

We'd like you to adapt your words and will exclusively to the big world of your dot-com, where, presumably, everyone likes you and your enervating screeds and bloviations find total acceptance and agreement.

We have a surfeit of accurate and cogent info and no need of your tiresome, preachy screeds.

It's not a case of liking you or not liking you. Your behavior on this NG could be described like that of a young puppy: no matter where one tries to touch the puppy, there's a set of teeth waiting. Some puppies seem to mature into ill-mannered porcupines.

Provide us yet another dithyramb in response to three questions:

1. Can you stay on-point in your answer to question 2.?

2. In what way or ways do you enjoy and find happiness in subjecting yourself to the NG-milieu of accusations you so wearyingly repeat and repeat and repeat?

3. Is your answer to Q2 off-point?

We await your rejoinder.

K3BHJ

574. Re: {{{ MOBILE ANTENNA MOUNT QUESTION }}}

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: Andy Brinkley <andy@brinkleyelectronics.com>
Message-ID: <spt38d3b87v14@corp.supernews.com>
Source record: 182367

Dave -

#1 I would recommend Stainless Steel, but the brass will work if the Teflon grease is liberally applied to the threads.

#2 I would use the 3/8" mounts if possible, due to the larger roof area sandwiched between the mount and the antenna.

#3 In order to prevent drilling through the headliner, wrap a piece of tape around your drill bits approximately 1/4" from the drill point. This will keep you from drilling to far.

Just my opinions.

Andy

NC Certified Firefighter III / Instructor II / EMT-A
FCC Licensed Technician / Amateur Call AG4AW
http://www.brinkleyelectronics.com

"STUDIO DED" <studioded@aol.com> wrote in message news:20000814001815.10900.00000489@ng-fz1.aol.com...
> Thanks for any and all input on my dilemma. I'm going to install (read: DRILL
> HOLES FOR) multiple NMO mounts in the roof of my Ford Explorer. I have 2
> questions.
>
> #1 What is the better material to buy the mount in?
>
> stainless steel, or brass? They are available in both.
>
> #2 What size mount is the best to use 3/4" (install from the top-LARGE HOLE)
> NMO or 3/8" (bottom install-smaller hole) NMO?
> I will be using various VHF & UHF (18"-45") antennas.
>
> Any other "installation tips" are appreciated. Thanks to all who respond.
>
> Dave studioded@aol.com
> N9DAV

575. HF loop antenna close to ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:00:00 UTC
From: kmccoy@stetson.edu
Message-ID: <399e931e.547677@news.stetson.edu>
Source record: 182368

I have an interesting situation: an aluminum-roofed carport about 50 feet long, 15 feet wide and 20 feet off the ground, apparently designed to hold a very large RV. I would like to use it as a ground plane for a multi-band wire loop antenna. I have friends who have heard of an antenna design that might work--a horizontal loop riding a few inches above its ground plane--but we can't recall the name or the design specs. Anyone out there who can help with information and/or sources?

73 de KF4BQF Ken
kmccoy@stetson.edu

576. Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:09:23 UTC
From: cathexis@erols.com
Message-ID: <399dcae0.210292992@news.erols.com>
Source record: 182326

Greetings,

The 2000 ed. of The A.R.R.L. Hndbk. lists a project to
throw up a 1 wavelength horizontal loop they call, " The Loop
Skywire." It's cheap, I've got the wire (500ft. roll of 14AWG ins.),
and the trees to throw up it up as a lop-sided horizontal Quad, in
effect. So ,okay go for it.

What I'd like is feedback on a couple of questions. First
is insulators. I can scavenge two egg-types but getting more
means basically a 2 hr. expedition and more money. They're not
a Home Depot / RS item unless I but another RS SW Ant. Kit.
Since the wire is insulated, how important are they?? Just to
counteract line tension by swaying trees?? Maybe I'd rather just
take my chances if that's true.

Secondly, this loop certainly gets a glowing review from
the Hndbk. Do you agree with it? Experience with it? To compare,
currently I'm using a 66ft. random wire 20ft up and I'm using it for
my reciever (RS DX-392). So this loop is for RX only. Not sure
how much higher I can get with the loop (especially if I have to
climb up and tie off insulators). Which is another issue: Even if
insulators are worth it, would it be better to go for max. alttitude
of the circuit and just forgo the insulators? I have at least two
possible "routes" to use; the first is a shade over 40M wavelength,
the 2nd a shade over 80M wavelength. I wanted to go with the
80M for broader band coverage. I'm a newly licensed ham and
don't have more than Tech. privs. right now so this is just to make
for some better DX'ing on my reciever. Seems easy and cheap,
what do you think?

THX,

Andrew
KG4JBM

577. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:15:45 UTC
From: fractenna@aol.com
Message-ID: <20000818201545.05096.00000163@ng-fm1.aol.com>
Source record: 182327

I want to make it clear that efforts to maliciously libel me and my corporate firm have recently produced a query from a major telecom company, in which one of their chief engineers stated he will not have anything to do with the technology--based on these comments.

I will state clearly and emphatically that this is compelling evidence for libel and likely lost income based on such NG posts.

The situation is very serious, and in my opinion, at this point deserves media attention on how the internet is being used to kill companies.

I would like to remind those who libel that ATT had one such person in Houston put in jail a few months ago for such manipulation. The precedent is there.

Nathan Cohen, Ph.D.

578. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:23:37 UTC
From: fractenna@aol.com
Message-ID: <20000818202337.05096.00000164@ng-fm1.aol.com>
Source record: 182328

>I would be particularly interested in his explanation of how
>Krauss et all managed to botch the theory of small loops.
>

Kraus--not KRAUSS

See Cohen and Hohlfeld; Comm Quart (1996); and Cohen (1997) . References on the web site in a few days:

http://www.fractenna.com

and sub-links.

The physics is obvious: There are two current maxima. The rad resistance is higher and the effiency is higher. This is discussed in the FAQ on the web site.

The same result-- two current maxima; unexpectedly high rad resistance and field strength-- was reported for short monopoles by Puente et al in 1998.(Electronics Letters).

Go model MI2 yourself and see.

Chip N1IR

579. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:24:25 UTC
From: fractenna@aol.com
Message-ID: <20000818202425.05096.00000165@ng-fm1.aol.com>
Source record: 182329

>Chip is now resting comfortably in my kill file. That did it for me.
>--
>CW
>KC7NOD

Did WHAT for you?

NC

580. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:28:37 UTC
From: fractenna@aol.com
Message-ID: <20000818202837.05096.00000166@ng-fm1.aol.com>
Source record: 182330

>Al- You are SO right- nice!
>
>His computer is still functioning- there is a mini love fest going on on
>the private list, interspersed with notice that he cant talk about the
>two more patents he expects out soon.

The opposite of what you state ,compared me to the Psycho guy. That didn't make it to the reflector, thank you.
>
>He has also offered to make copies of THE PATENT for anyone who sends in
>a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
>qualify. Guess I'm out.
>

No; I didn't say that. So if this is the first you have seen of this offer, don't waste your time. Yes Bill Aycock-- you cannot get a copy from me. I confirm that your litany of personal libel and abuse excludes you.

>He will be busy till after Labor day, so copies will be delayed.
>

>Bill- W4BSG
>

NC

581. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:45:28 UTC
From: 2w8ji@contesting.com
Message-ID: <399dd5b8.55845238@news.akorn.net>
Source record: 182332

On Sat, 19 Aug 2000 00:09:23 GMT, cathexis@erols.com (Set'em up Joe) wrote:

>currently I'm using a 66ft. random wire 20ft up and I'm using it for >my reciever (RS DX-392). So this loop is for RX only. Not sure >how much higher I can get with the loop (especially if I have to >climb up and tie off insulators). Which is another issue: Even if >insulators are worth it, would it be better to go for max. alttitude >of the circuit and just forgo the insulators? I have at least two >possible "routes" to use; the first is a shade over 40M wavelength, >the 2nd a shade over 80M wavelength.

First thing to remember is directivity is the only thing that mattters on a receiving antenna at HF, assuming the antenna transfers enough power to the receiver that external noise limits reception. Directivity in this context includes polarization and pattern.

Unless the loop happens to have a higher response in the direction of signal than it does in the direction of noise, it will be no different than any other antenna. The gain of multi-lobed antennas is largely useless, unless you can aim the antenna so the lobes line up with the desired directions or null know noise sources.

If you can't do that, you are probably better off with a broad response antenna.

As a general rule, the higher and more in the clear the better. I'd go for all the height I could, consistant with the thing staying up. What the heck, give it a try the simplest way you can.

73 Tom

582. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 00:59:58 UTC
From: k9sqg@aol.com
Message-ID: <20000818205958.20846.00000365@ng-ba1.aol.com>
Source record: 182333

It's not quite that simple. You should probably get a lawyer to research your particular area. There are binding, non-binding, and partially binding CCRs. You might be faced with one or another depending on the local zoning situation. In addition, there is the issue of enforcement. You don't necessarily have to sign something in order for it to be binding. And be aware of the politics. For example, a developer can pretty much do as he pleases if he "owns the land and can cast a single vote for each lot he owns" and thus gives him more leverage than individual homeowners. Further, there are sometimes "vague" yet legal clauses that apply to situations where the "homeowners can have something declared undesirable by a majority vote of the board, not the homeowners" and it too is binding. In another part of the city where I live, there was a CCR forbidding ANY vehicle maintenance anywhere on the property. One homeowner was fined because he did some work inside his garage! He was not able to successfully petition the court that this was an undue infringement. And by the way, the fact that somebody has a boat parked in their driveway, a camper parked in the street, or a car up on blocks, is no guarantee that a ham antenna won't be objected to. Best of luck.

73

Evan

583. Re: unplug during lightning storms: but how far a gap?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 01:04:26 UTC
From: k9sqg@aol.com
Message-ID: <20000818210426.20846.00000366@ng-ba1.aol.com>
Source record: 182334

And if you are going to ground the tower, it should be done early. When the hole is dug, drive the ground rod into the lowest part of the hole. Solder/weld a heavy braid to it, encase it in plastic tubing or wrap with tape to prevent the curing cement from attacking it, and then attach it to the base before the concrete is poured. When a ground rod is put next to a tower, seems like the lightning doesn't like the right angle turn at the base and it will continue to go down into the base. Just another thought...

584. WTB: RF ammeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 01:08:41 UTC
From: k9sqg@aol.com
Message-ID: <20000818210841.20846.00000368@ng-ba1.aol.com>
Source record: 182335

Need two identical meters, something like 1-5 amps max, in like new condition.

73

Evan

585. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 01:16:17 UTC
From: k9sqg@aol.com
Message-ID: <20000818211617.20846.00000369@ng-ba1.aol.com>
Source record: 182336

Theory and my empirical data do NOT support the notion that all signals will be down with a loop antenna compared with all other antennas. I have some data plots that will confirm this from many contacts over an extended period of time comparing a full wavelength loop with a vertical antenna. Two plots exist, one for transmit signal strength, and one for received signal strength. The findings: the loop far outshined the vertical close in with a difference of as much as 15 db or so. As the distance increased between the stations the differences decrease until both antennas were equal at a distance of 1,000 miles. Beyond that the vertical took over.

On receive, the loop produced 1-2 S units of less noise and signals could be heard with the loop that could not be heard on the vertical.

I would be happy to send the Excel plots to anybody who is interested. I'm working on an article describing the results too but haven't finished it yet.

Just one ham's data.

73

Evan

586. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 02:13:59 UTC
From: fractenna@aol.com
Message-ID: <20000818221359.08135.00000341@ng-cf1.aol.com>
Source record: 182337

>I wonder if he was just too nice to say that his decision was actually
>based on his reaction to the nature of your comments. Something to
>think about anyway.
>
>73 de ac6xg
>
I think not. But thanks for the unsubstantiated speculation.

73
Chip N1IR

587. Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 02:27:19 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <bgmn5.2556$x16.176324@monger.newsread.com>
Source record: 182338

OK, for the engineers, or mathematically inclined...

I've installed a Rohn 45G, but due to a driveway I had to raise the guy anchor point 10 feet and do it on all three anchors to keep the system symmetrical as well as out of the way.

I did this by using five inch diameter heavy wall steel pipe which sets in two yards of concrete, the base of which is six feet below grade. The anchors are out 80% of the tower height., or roughly 80 feet. (79 is you want to be specific)

The guys are tensioned to 10% of their breaking strength or 400# for all guys on the bottom two tier (31 and 65 feet elevation) and 600# for the top tier (96 foot elevation).

Now, to those who have installed towers up to 50, or even 60 feet, this probably sounds like a rather sound guying of the installation and they are sturdy...Unfortunately at 90# per section of tower and all that guy tension they are also just a wee bit flexible as are freshly installed Phillistrand guys. Not enough to really notice while climbing the tower, but (without taking the time to calculate the horizontal pull 10 feet up, on the 300# pipes set in over 11,000# of concrete) that horizontal moment is substantial and leads to a tiny bit of flexing. (it don't take much)

If you place a hand on any of the guy anchor posts you can feel every touch of the wrench to bolt, or every step from tower cross rung to rung.

Most of the stretch, what little there was has pretty much been eliminated from the bottom tier of guys. The second tier is getting better.

The top guys will come in steep enough that they can be anchored right at the top of the concrete pier, or base of the five inch pipe. It will have to be offset far enough that the guy lines will not rub where they cross.

As the goal is for three independently controlled arrays on the tower, the flex must be kept down to an absolute minimum. The HF array at the top of the tower will be roughly 18 sq. ft (and near 200#), with a 6 sq. ft antenna about 12 feet above that ant about a 4 sq. foot array 12 feet above that. The stretch in the Kevlar (Philistrand will pretty much be eliminated after a couple of weeks at tension...Actually they are retensioned at roughly three, seven, and 14 days after the initial tensioning at installation.

The five inch diameter pipe is a more interesting case as tightening the guy lines properly puts the pipe/system almost "in tune". Over tensioning can make for a very interesting situation. Similar situations can be found it steel guys are not properly positioned and tensioned.

Here, "I'm thinking" of changing both the resonant point and rigidity of the pipes by possibly :

1. inserting three re-rod and pouring a rich mixture of concrete into the pipe.
2. Inserting an I-beam that will just fit and again pouring in concrete, or
3. Welding I-beam to the front of the post to reinforce it and again filling the pipe with concrete.
4. Respace and add a 4th tier of guys?

Concrete by itself can be very flexible.
I have a 3" pipe set in the ground to support an 11 foot satellite dish for tuning. With the weight of the dish that 3" post will oscillate at a rate between one and two seconds per cycle and at an amplitude of about a 4" swing at a height of 6'.

The system will work as is, but I want to make the tower as rigid as practical.
I'd hate to find that a given load and wind would hit a resonant point.

Any suggestions?

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

588. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 02:35:20 UTC
From: 2w8ji@contesting.com
Message-ID: <399df0e6.62805028@news.akorn.net>
Source record: 182339

On Fri, 18 Aug 2000 21:35:38 -0500, Arthur Unwin <aunwin@fgi.net>
wrote:

>Have a question tho, if a dipole wire passes thru a floating
>ungrounded conductive tube what effect does it have on radiation
>or the feed impedance?

The wire induces a current on the inside of the tube, which flows in a direction opposite the current in the center conductor. It spills arouund the ends and flows across the ouside, of course reversing direction so it parallels the current on the inner conductor.

The end effect of this is you add a bit of extra loss resistance in series with the original conductor, and change its surge impedance a bit.

73 Tom

589. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 02:42:30 UTC
From: 2w8ji@contesting.com
Message-ID: <399df23f.63150224@news.akorn.net>
Source record: 182340

On 19 Aug 2000 01:16:17 GMT, k9sqg@aol.com (K9SQG) wrote:

>Theory and my empirical data do NOT support the notion that all signals will be
>down with a loop antenna compared with all other antennas.

Who said that?

>On receive, the loop produced 1-2 S units of less noise and signals could be
>heard with the loop that could not be heard on the vertical.

That could only be because the loop happen to have a null in the
direction of noise that made noise reception less than the response to
desired signals.

At HF, gain doesn't matter for receiving unless the system has extreme
sensitivity problems.

Loops are not more quiet than any other geometric form, unless the
antenna happens to respond less to the direction of noise compared to
response in the direction of the desired signal.

73 Tom

590. Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 02:52:08 UTC
From: cathexis@erols.com
Message-ID: <399df4a5.220987364@news.erols.com>
Source record: 182341

Man, are those pesky crows bugging me. Now in my
life the one thing that really scares the crap outta me is my wife.
My mother-in-Law tells me I should Thank God for her. I do.
I tell my Mother-in-Law that every morning, the first thing I do
is I roll over and see my wife asleep in the bed and say,

" Jesus H. Christ. Thank God!!! "

I figure a good plastic wife out back would really give those
crows second thoughts about landing on MY wire. Yep.
Does anybody know who sells those Plastic XYL's ???

THX,

Andrew
KG4JBM

591. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:02:59 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <DNmn5.2563$x16.177322@monger.newsread.com>
Source record: 182342

Generally a covenant is in place and can be part of the deed, or attached to the property, such as a subdivision.

If you purchase you are in effect agreeing to it.

Zoning on the other had at least gives you a legal fighting chance...Up to a point. When it comes to safety such as set back ordinances and requiring engineering for "larger" towers they are quite legal and are not preempting FCC authority. OTOH if the zoning contains arbitrary heights and prohibitions you again have a chance.

My advice "for what it's worth" is to avoid any area that has covenants, or associations that limit what you can do within the realm of reason.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"K9SQG" <k9sqg@aol.com> wrote in message
news:20000818205958.20846.00000365@ng-ba1.aol.com...
> It's not quite that simple. You should probably get a lawyer to research
your
> particular area. There are binding, non-binding, and partially binding
CCRs.
> You might be faced with one or another depending on the local zoning
situation.
> In addition, there is the issue of enforcement. You don't necessarily
have to
> sign something in order for it to be binding. And be aware of the
politics.
> For example, a developer can pretty much do as he pleases if he "owns the
land
> and can cast a single vote for each lot he owns" and thus gives him more
> leverage than individual homeowners. Further, there are sometimes "vague"
yet
> legal clauses that apply to situations where the "homeowners can have
something
> declared undesirable by a majority vote of the board, not the homeowners"
and
> it too is binding. In another part of the city where I live, there was a
CCR
> forbidding ANY vehicle maintenance anywhere on the property. One
homeowner was
> fined because he did some work inside his garage! He was not able to
> successfully petition the court that this was an undue infringement. And
by

> the way, the fact that somebody has a boat parked in their driveway, a cam
per
> parked in the street, or a car up on blocks, is no guarantee that a ham
antenna
> won't be objected to. Best of luck.
>
> 73
>
> Evan

592. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:10:38 UTC
From: kk5yy@arrl.net
Message-ID: <399ff876.50233761@nntp.mindspring.com>
Source record: 182343

On 19 Aug 2000 00:15:45 GMT, fractenna@aol.com (Fractenna) wrote:

>I want to make it clear that efforts to maliciously libel me and my corporate
>firm have recently produced a query from a major telecom company, in which one
>of their chief engineers stated he will not have anything to do with the
>technology--based on these comments.

You don't suppose that they are not interested because it is a load of
used male bovine creature food, do you? Nah more likely this is just
a Fig Newton of Chip's imagnatation.
>
>I will state clearly and emphatically that this is compelling evidence for
>libel and likely lost income based on such NG posts.

You really should get a competent lawyer or at least some new writers.
There is an old saying in the law, "He who represents himself has a
fool for a client."
>
>The situation is very serious, and in my opinion, at this point deserves media
>attention on how the internet is being used to kill companies.

Chip if the 60 Minutes van pulls up in front of your place it is NOT
going to be a good day.
>
>I would like to remind those who libel that ATT had one such person in Houston
>put in jail a few months ago for such manipulation. The precedent is there.

Hey those guys are the Phone Cops (Johnny Fever) you ain't nothin boy.
Put in jail for a civil offense din't we fight a war over this kind of

stuff. It was in your part of the woods. Come on Chipper tell us the
rest of the story.
>
>Nathan Cohen, Ph.D.

A straw pole of local PhDs concluded that you are an embarassment and
they wish you would stop using the title.
>
Love Jerry

593. Sheet of metal as a ground plane for an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:13:59 UTC
From: jason_hsu@my-deja.com
Message-ID: <8nku1ehml1@nnrp1.deja.com>
Source record: 182345
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

I think I have an idea on how to ground an antenna for the apartment HF shack I still haven't equipped yet.

Some of the things I have learned in my 007 mission to obtain the equipment I need to operate HF:
1. Unless I use a balanced antenna (like a loop or dipole), I must establish a good ground/counterpoise. How important this is depends on whom I talk to.
2. In mobile operations, the vehicle itself provides a ground plane. Thus, there is no need to mess around with ground rods or 1/4 wavelength radials.

I am seriously considering using a Bugcatcher antenna at my apartment. Can I use a sheet of metal (or a metal screen) instead of my car as a ground plane? If so, how large and thick must this sheet of metal be? If this setup can work, I can have a good temporary HF installation that I can bring inside when I am not operating. The fact that I live on the ground floor with no bushes or trees to conceal wires means that I cannot have an outdoor antenna that is sufficiently stealthy. The alternative seems to be a temporary installation that I keep outside only for the few hours per week I expect to operate.

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/tech-dwdm.html

Sent via Deja.com http://www.deja.com/
Before you buy.

594. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:17:44 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <s%mn5.2565$x16.177074@monger.newsread.com>
Source record: 182344

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Weir" <jim@rst-engr.com> wrote in message
news:askqpsgghidegb94ls90j1c69plc1kr97o@4ax.com...
> Terry Sanford <tsanford@roadrunner.nf.net>
> shared these priceless pearls of wisdom:
>
> -
> ->Reason I ask is that I was thinking about using 'N' type at base of my
> sailboat
> ->mast for marine VHF (max 25 watts) because it looked a lot more
waterproof
> than
> ->the PL-259/SO-239 type.
>
> N is way, way overkill. BNC is smaller, lighter, a hell of a lot easier
to put
> together, and comes in the right size for RG-58 cable, which is probably
what
> you will want to use at 150 MHz. and 25 watts.
>
> If you want it REALLY, REALLY waterproof, squeeze some silicone seal onto
the
> connector, then shrink sleeve over that. Make sure that you shrink it
from the
> center out to the edges and that some silicone "bleeds" out the end of the
> sleeving where it goes over the coax. It will take a knife and an
afternoon to
> ever get it apart again, but it is guaranteed waterproof for life.

Couple of items.
If the silicon seal smells like acetic acid? It's the corosive stuff.
Don't put it in contained areas.
Where I used to work we purchased a whole bunch of transducers potted in the
stuff inside cast aluminum boxes.

About a year later they started going bad.
Sure enough, when we started takeing them apart we found that most of the
foil was gone from the boards. Well over $20,000 down the drain plus labor
which made the $20,000 look like chicken feed.

Get the stuff that "stinks", but not the black stinky stuff as it is
conductive.

I believe both GE and Dow Corning make the non conductive stuff as well as the regular. I know DC does as I worked for them well over 30 years. That is why I also know that if it smells like acetone it's corosive.

I use DC-4 compound and fill the connector, then like Jim, I head the shrink tubing from the center out. Actually I do each end first, then move to the center and work out and use a piece of tubing about five to six inches long.

I have used the "bathtub calk" which is usually corosive and had it eat the plating right off the connectors. (smelled like acetone)
Also, that stuff cures by moisture so if it cures inside the connector within a few days you can be certain that the connector was not moisture proof, or well sealed, heat shrink tube, or not. Then again, the silicon rubber (such as Silastic RTV @) is water proof, but not moisture proof.

But...As I said, it is water proof and will keep salt out as well.
>

I've even used the bathtub calk to seal coax to dipoles and it turned green where the stuff contacted the copper wire. Course out there and with heavy wire it's not really a problem, but finer wires, solder, and foil in contained spaces are bad news.

Roger (K8RI)

> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

595. Re: WTB: RF ammeters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:35:29 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <399E0001.A88AFB88@att.net>
Source record: 182346

Don't overlook simple light bulbs as r-f ammeters.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

K9SQG wrote:
>
> Need two identical meters, something like 1-5 amps max, in like new condition.
>
> 73
>
> Evan

596. Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 03:54:14 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Gxnn5.2567$x16.178003@monger.newsread.com>
Source record: 182347

I thought I'd put this into a thread by itself.

From time to time some one will mention the use of Silastic RTV @, or other brands of silicon sealant for use in amateur Radio.

Much of it works great and there are other materials out there that work well too.

I'd assume that the acrylics work well too, if given a chance to fully cure before being put out into the elements.

A major word of caution though.
Any of the RTVs that smell like Acetone do so because you really are smelling Acetone.

In confined places with prolonged contact, Acetone is corosive to copper, aluminum, and solder.

There are a number of RTVs that do not use acetone, but rather alcohol and possibly other agents. In general they use the moisture in the air to aid curing as do those that smell like Acetone.

I've heard salesmen get really excited and claim that "their brand" is not corrosive, but if it smells like Acetone... and theirs did!

As I mentioned in another post, one company ended up with a very large expense because they were using an RTV (that smelled like Acetone) to pot some transducers and printed circuits in some cast Aluminum boxes.

A year later the circuits started failing and dismanteling showed that the wires, printed circuits, and solder joints were just crumbling away to be left by a white (or green) powder.

I "prefer" to use DC-4 compound *in* connectors. It's a dielectric grease that was developed in WWII to fill the spark plug connectors in B-17s and other aircraft to keep them from arcing at high altitude.

The stuff is clear, but *messy* and expensive. Some antennas come with a tiny capsule of it and no, I'm not talking about Pentrox. It does form a film that stays and prevents oxidation.

I also use the Marine "Liquid Electrical Tape" which works great. Doesn't last long after the can has been opened, but works great. I usually run out, before it drys out any way. <:-)) It's not very expensive either.

When using DC-4, I typically fill the connector with DC-4, make the connection which squeezes grease all over. I try to keep the grease from covering the outer surface of the connector. Then clean up and give the

connector at least three coats of the liquid electrical tape. Allow plenty of dry time between coats.
No, I've never noted a problem with an impedance bump using the grease in the connectors and I checked a few with a time domain reflectometer.
You do have to give the connectors a thorough cleaning after the grease though or absolutely nothing will stick. <:-))

For most work, I just use the liquid electrical tape. On UHF connectors you want to make certain that the entire connector is covered after assembly. Water can get in either end.

When using 9913 or similar cables I use the grease as water in one end will run right on out the other and the normal connectors only slow it down a little.

There is a stain on my operating desk right at the back of my two meter rig from where the water was dripping on the desk.
I hadn't filled the connectors and a lightening hit took the tape off the outside of the connectors up on top. That leak cost me nearly 200 feet of 9913.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

597. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 04:53:40 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <opon5.2575$x16.178867@monger.newsread.com>
Source record: 182348

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:399E093B.55DB3573@hiwaay.net...
> Roger, et al-
> Do you really mean "Acetone" (dimethyl Ketone) or do you mean "Acetic
> acid" (smells like vinegar)?

Oops! Yes, Yes, Yes....Acetic Acid.... I was thinking one thing and typed
another. Although Acetic Acid is a *really* strong vinegar smell. <:-))

> There is a world of difference, and it IS important.
> Acetone is a solvent, used in lacquer and various paints, and in Nail
> polish remover. Sometimes used to thin Epoxy.
> Acetic acid is one of the common acids. At 5% solution, it is sold as
> vinegar- in The common Silicone caulks, it is released by reaction with
> atmospheric moisture, to initiate the curing process.
>
> Bill-W4BSG
>
> Roger Halstead wrote:
> >
> > I thought I'd put this into a thread by itself.
> >
> > From time to time some one will mention the use of Silastic RTV @, or
other
> > brands of silicon sealant for use in amateur Radio.
> >
> > Much of it works great and there are other materials out there that work
> > well too.
> >
> > I'd assume that the acrylics work well too, if given a chance to fully
cure
> > before being put out into the elements.
> >
> > A major word of caution though.
> > Any of the RTVs that smell like Acetone do so because you really are
> > smelling Acetone.
> >
> > In confined places with prolonged contact, Acetone is corosive to
copper,
> > aluminum, and solder.
> >
```

> > There are a number of RTVs that do not use acetone, but rather alcohol
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> > possibly other agents. In general they use the moisture in the air to
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> > curing as do those that smell like Acetone.
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not
> > corrosive, but if it smells like Acetone... and theirs did!
> >
> > As I mentioned in another post, one company ended up with a very large
> > expense because they were using an RTV (that smelled like Acetone) to
pot
> > some transducers and printed circuits in some cast Aluminum boxes.
> >
> > A year later the circuits started failing and dismanteling showed that
the
> > wires, printed circuits, and solder joints were just crumbling away to
be
> > left by a white (or green) powder.
> >
> > I "prefer" to use DC-4 compound *in* connectors. It's a dielectric
grease
> > that was developed in WWII to fill the spark plug connectors in B-17s
and
> > other aircraft to keep them from arcing at high altitude.
> >
> > The stuff is clear, but *messy* and expensive. Some antennas come with
a
> > tiny capsule of it and no, I'm not talking about Pentrox. It does form a
> > film that stays and prevents oxidation.
> >
> > I also use the Marine "Liquid Electrical Tape" which works great.
Doesn't
> > last long after the can has been opened, but works great. I usually run
> > out, before it drys out any way. <:-)) It's not very expensive either.
> >
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> > connection which squeezes grease all over. I try to keep the grease from
> > covering the outer surface of the connector. Then clean up and give the
> > connector at least three coats of the liquid electrical tape. Allow
plenty
> > of dry time between coats.
> > No, I've never noted a problem with an impedance bump using the grease
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> > the connectors and I checked a few with a time domain reflectometer.
> > You do have to give the connectors a thorough cleaning after the grease
> > though or absolutely nothing will stick. <:-))
> >
> > For most work, I just use the liquid electrical tape. On UHF connectors

you
> > want to make certain that the entire connector is covered after
assembly.
> > Water can get in either end.
> >
> > When using 9913 or similar cables I use the grease as water in one end
will
> > run right on out the other and the normal connectors only slow it down a
> > little.
> >
> > There is a stain on my operating desk right at the back of my two
meter
> > rig from where the water was dripping on the desk.
> > I hadn't filled the connectors and a lightening hit took the tape off
the
> > outside of the connectors up on top. That leak cost me nearly 200 feet
of
> > 9913.
> > --
> > Roger Halstead (K8RI) www.RogerHalstead.com
> > N833R World's Oldest Debonair? s# CD-2

598. Re: Help!! The unmatchable dipole...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 06:02:41 UTC
From: w4hij@my-deja.com
Message-ID: <8nl7tr$s2h$1@nnrp1.deja.com>
Source record: 182349

In article <399DB3A9.51578BC6@eznec.com>,
Roy Lewallen <w7el@eznec.com> wrote:
> This antenna will be quite narrowbanded, so you'll have to get the
> loading inductance pretty close to see any resonance within the band.
> The amount of inductance depends strongly on the dipole's diameter,
and
> much less on the antenna's height. According to EZNEC, you need about
5
> uH total, or about 2.5 uH per side for a 1" diameter antenna, and 7.8
uH
> total for a dipole made from #12 wire. When resonant, the feedpoint
> impedance should be about 23 ohms plus coil loss for either diameter,
so
> you should see about 2:1 SWR when you get the loading right. If you
want
> better than that, you'll have to use some sort of matching
arrangement,
> but most rigs won't complain about 2:1. If you don't have an antenna
> analyzer, dip meter, noise bridge, or other way to find resonance, I'd
> temporarily add some inductance, then tap down on the coils until you
> find resonance, then make a more permanent connection after you know
> about the right coil size. The antenna will be more narrowbanded than
a
> full size dipole, but otherwise just as good for all practical
purposes
> (if you can keep the coils clean and dry).
>
> Roy Lewallen, W7EL
>
> Thanks for the advice Roy, the antenna is made of half inch copper
water pipe that i had lying around and the coils are wound on PVC
forms. I guess you would call it plumber's delight!! hi hi I should
have realized the radiator diameter might have something to do with it.
I have had good luck building full size antennas for 10 meters with
half inch copper. I will try tapping the coils as I don't
have an anylyzer. Just a stab in the dark....would the addition
of "capaticance hats" do anything at all?? Seems I have seen them used
on loaded antennas before...
Thanks again,
73 Michael

Sent via Deja.com http://www.deja.com/
Before you buy.

599. Need 67pF 7.5kV capacitor for Butternut HF9V vertical.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 15:40:54 UTC
From: Mike <Mike@g3uof.worldonline.co.uk>
Message-ID: <399eaa85@news.server.worldonline.co.uk>
Source record: 182267

Have just moved QTH, and unfortunately broke the 67pF ceramic capacitor when re-assembling it - anyone got a spare one for sale, or know where I can get one at a 'reasonable' price?

Thanks, 73, Mike G3UOF

Please reply to: g3uof@hotmail.com

600. Anyone Using the R8 Verticle

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-19 22:37:16 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <399f0bcf$0$766$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182268

Hi anyone using the R8, how does it compare to the R7000 ??
rgds Dennis

601. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <8a90qskmlrad7d0c8j0f4ci0nn36n8bas6@4ax.com>
Source record: 182069

On Sun, 20 Aug 2000 04:29:00 -0700, Will <wcwhite@mindspring.com>
wrote:

>No thanks! I am moving to
>Seattle at the end of the year, and hope to be in the home shopping mode
>withing 2 or 3 years after that, and from my preliminary research, CC&Rs
>will not be a problem.

Beware of Seattle - when I lived there a couple years ago, there was a
50-foot height limit on towers inside the city limits.

>What's next? Republicans-only?

Now, that makes sense! :-)

73, Bill W7TI

602. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <1h90qs43o197ucteoihtqpqh0g7kmjf0q2@4ax.com>
Source record: 182070

On Sat, 19 Aug 2000 02:05:39 -0700, Jim Weir <jim@rst-engr.com> wrote:

>Use clear
>silicone seal (even if it smells like vinegar) on the connectors, shrink
>sleeving over the connectors and the goop, and enjoy your boat.

There's a type of silicon seal that doesn't smell like vinegar and
which is totally waterproof - it's used to assemble aquariums. Get it
at any pet shop. The "vinegar" smell is acetic acid - nasty stuff
around metal. Best not to use it.

73, Bill W7TI

603. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a02449.34248340@news.akorn.net>
Source record: 182071

On Sun, 20 Aug 2000 13:19:16 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>The only remaining question is if one value of L will provide a proper match
>for bands where the antenna is used as a T. I
>suppose changing L values is as simple as grounding a "Tap" placed on the
>coaxial winding shield at the proper inductance..

If you want to build one, I'll help you. Then you can wrirte a nice
article about it, so others can build one.

Let's call it the big "T" flyer.

73 Tom

604. Re: S-Meters and all that . . . (new subject name)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a02637.34742916@news.akorn.net>
Source record: 182072
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 17:04:34 GMT, "George , W5YR" <w5yr@att.net>
wrote:

>Remarkable radio - and the dot:dash ratio remains at 1:3 at all other
>settings of the keyer.

The most discouraging part of the keyer in my 706 Icom, and other Icom
radios, is when I brought the fact they messed up the weight control
to the attention of Icom an employee said "who cares, no one works CW
anyway".

That being the case, why put keyers in the radio?

73 Tom

605. modification

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: crane_e@thezone.net
Message-ID: <39a0293e.318450440@news.thezone.net>
Source record: 182073

looking for a stie to get modification for 2 meter radios can you recomend a good homepage please email asap.

606. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <8npa6p$aq0$1@slb6.atl.mindspring.net>
Source record: 182074
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Just so I'm sure I have it right, 100% weight is no time off
and 0% weight is no time on. At 33% weight, the dots would
be separated by an off period twice as long as the on period.

I.e. weight = dot length / (dot length + space between dots length)

73,
Tom
Tom W8JI <2w8ji@contesting.com> wrote in message
news:399fff20.24733743@news.akorn.net...
> On Sun, 20 Aug 2000 08:58:19 -0400, "Tom Wagner - N1MM"
> <tomwagner@mindspring.com> wrote:
>
> >I looked it up, and I believe that it is the ratio of dot to (dot +
space)
> >length.
> >Dash remains 3 times the dot length.
>
> The weight is the ration on on time periods to off time period. One
> time period makes a dot, three periods make a dash.
>
> So the ratio of "transmit time" to "off time" changes, but the ratio
> of dot length to dash length remains contant.
>
> In early keyers, that was accomplished by changing the threshold
> point of a triangle wave triggering system.
>
> ICOM changes the ratio of dots to dash, which is totally useless, No
> CW operator in his right mind uses anything but a 1:3 ratio between
> dot and dash.
>
> It is the 1:3 to X ratio that should change with weight control. Less
> weight is desirable at high speeds when the BW of the signal
> approaches the BW of the filters, and more weight is better at slow
> speeds especially with weak signals.
>
> >That should help improve the sending of the program. The web page for
the
> >program
> >can be seen at:
> >http://tomwagner.home.mindspring.com/n1mm.htm
>
> I'll have a look at that.
>

> 73 Tom

607. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000820151443.04079.00000251@nso-fr.aol.com>
Source record: 182075

In article <20000820062922.23914.00000347@ng-co1.aol.com>, jhulet@aol.com (Jason S. Hulet) writes:

>Seems I have heard may negitive comments on the Outbacker HF Mobile >antennas.

>Anyone out there that actually like the Outbacker for HF Mobile operation?
>Is it really the much worst then say a Pro-am whip or Ham stick?

I suggest the oubacker is a sturdy antenna, one you could probably take off your antenna mount, beat a pack of wild dogs to death with and then connect up and have approximately the same antenna performance you previously had. That being said, it is not a stellar HF mobile performer, its performance on 75 meters is well below that of a screwdriver, large bugcatcher, center leaded whip (ala for example Hustler) or the tapered whips used by folks like Hamstick, Lakeview et al.

It does have some usages. Ham truckers who regularly have to switch trucks might find them useful, since they can be easily moved and offer multiple HF band access, someone who drives a company vehicle or rents probably will find them of use (no holes, no worries about excessive bending of car parts). If you fall into either category, the Outbacker is for you, but for best performance on 40M & 75M, you probably want a screwdriver or BugCatcher, if they're too large, next in performance is a center loaded antenna, then the spiral loaded whips. There are of course small HF center loaded antennas like the Comet antennas which have a variety of performance problems which fall in between "normal" center loaded and spiral antennas, and finally things like the OutBacker, and base loaded whips. It's your choice. If appearance or size is very important, then perhaps the OutBacker is for you, but with a known performance deficit.

-art clemons-

608. What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Jim Bo <jbollit@ix.netcom.com>
Message-ID: <39A033D6.83A7F750@ix.netcom.com>
Source record: 182076

Hello,

I read many many years ago about a method of grounding a ham radio transmitter that is located on the second floor of a house.

It involved using coax. The dc path for the ground was the center conductor. The "different" part of this method involved taking 0.001 microfarad caps and connecting them at each end of the coax from the outer braid to the center conductor. There was no dc connection to the braid, but at each end the braid was connected to the center conductor via the 0.001 microfarad caps.

This was supposed to make a better rf ground for the radio located on the second floor.

Does this make sense? What principal is in effect that makes it "sense?

Thanks in advance.

Jim
*

609. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8npd58$875$1@bob.news.rcn.net>
Source record: 182077

Well Tom, I checked your webpages for the Big-T Flyer, and I couldn't find
it.
Draw me up something on a napkin. I do want to build one.

Peter

Tom W8JI <2w8ji@contesting.com> wrote in message
news:39a02449.34248340@news.akorn.net...
> On Sun, 20 Aug 2000 13:19:16 -0400, "Peter Bertini"
> <commquart@erols.com> wrote:
>
> >The only remaining question is if one value of L will provide a proper
match
> >for bands where the antenna is used as a T. I
> >suppose changing L values is as simple as grounding a "Tap" placed on the
> >coaxial winding shield at the proper inductance..
>
> If you want to build one, I'll help you. Then you can wrirte a nice
> article about it, so others can build one.
>
> Let's call it the big "T" flyer.
>
> 73 Tom

610. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <52e0qs45v6fqqda2n78ri888hchflqd2h6@4ax.com>
Source record: 182078

On Sun, 20 Aug 2000 12:39:02 -0700, Jim Bo <jbollit@ix.netcom.com>
wrote:

>I read many many years ago about a method of grounding a ham radio
>transmitter that is located on the second floor of a house.
>
>It involved using coax. The dc path for the ground was the center
>conductor. The "different" part of this method involved taking 0.001
>microfarad caps and connecting them at each end of the coax from the
>outer braid to the center conductor. There was no dc connection to the
>braid, but at each end the braid was connected to the center conductor
>via the 0.001 microfarad caps.
>
>This was supposed to make a better rf ground for the radio located on
>the second floor.
>
>Does this make sense? What principal is in effect that makes it "sense?

Sounds like a good April Fool article. Connecting a .001 mfd cap from
center conductor to the braid will create a very low impedance path at
radio frequencies. Essentially a short circuit.

If your neighbor is getting TVI, this would cure it when installed on
HIS coax. :-)

73, Bill W7TI

611. Re: Aerial for VLF/LF monitoring

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Mike Frye <km6ab@pacbell.net>
Message-ID: <39A03B49.52516622@pacbell.net>
Source record: 182079

There is a Singer VLF loop, 14 to 150kHz on Ebay. I'm tempted.....

612. Matching coil

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Sonny <afn05925@afn.org>
Message-ID: <39A03D07.D4E6C1D8@afn.org>
Source record: 182080

Howdy Guys
I have a Valor 40m whip that has a SWR of 1:6 to 1
I had to wind a coil around a 2 inch piece of PVC pipe.
I used number 14 bare copper and wound the coil using
string trimmer line as a spacer and when the glue dryad
I remover the line for a evenly spaced coil .
It works ,but its sort of big .
Can you guys give me so better ideas on making a coil ?

Thanks
73 de ke4sll

613. FS: Custom, Full-Color QSLs, $30

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: N7GSU <robin@n7gsu.com>
Message-ID: <G2Xn5.7611$uX.17901@newsfeed.slurp.net>
Source record: 182081

N7GSU QSLs offers custom designed, full-color QSLs for $30. These may include photos or artwork, single and double-sided - all $30! Our ever expanding stock designs, personalized with your information are just $15. These include many club designs. Does your club need a custom designed logo, club QSL or it's own award certificates, we do 'em!

Check us out at http://www.n7gsu.com

73,

Robin Faulkner, N7GSU QSLs

614. Re: Special Victim Alert

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A0442F.D6AD4EB9@cac.net>
Source record: 182082

K1BQT wrote:

> Real victims only wish to escape and get away.
>
> "Special victims" can't wait to get their hands on you so they can harang you,
> insult you, belittle you, sue you, have you arrested, or even have you chopped
> up and fed to the lions. Special victims frequently assume special rights
> allowing them to use unusual means to get the job done.
>
> Carried to its extreme, Kenneth McDuff mutilated and murdered eight women in
> Texas, yet met his final fate on death row complaining bitterly to the end that
> he was a victim of many forces. But, he wasn't an ordinary victim. He was
> "special".
>
> If you are threatened in an aggressive fashion by anyone claiming to be victim
> in a setting where attendance is purely recreational and voluntary (such as
> this newsgroup), run like hell! They may be "someone special" looking for you.
>
> Towertalk@contesting.com may be a good alternative for those who aren't
> "special".
>
> Rick K1BQT

Well, I for one welcome anyone "special" to try something... They may find I'm
really not worth the effort. ::grin::

-SSB

615. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39A04A65.D17D2734@haertig.com>
Source record: 182083

The cable manufacturer recommends that the cable be tensioned to 10% of
its rated load. Presumably the tower manufacturer's recommendation is
for that size cable (or equiv.).

Gray

Tom W8JI wrote:

> >I'm using the equivelant Phillistrand at 6000# and pretensioned to 600#, but
> >if
> >the load ever approaches 6000 # pull on the line it will have long since
> >passed
> >the survival point for the antennas, let alone the tower, or anchors.
>
> Then why did you buy 6000 lb cable?
>

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

616. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20000820171231.24149.00000911@ng-me1.aol.com>
Source record: 182084

I think Nathan needs a life.

His PHD<pilin' it higher and deeper> is a bit weak on the reality side. Looks like a lonely fella tryin to become a legend in his own mind, to me.

617. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <39a04947.149629419@news.erols.com>
Source record: 182085

On Sun, 20 Aug 2000 10:44:54 -0400, sideband <sideband@cac.net> wrote:

>Set'em up Joe wrote:
>
>> On Sun, 20 Aug 2000 07:25:24 -0500, 'Doc <w5lz@oio.net> wrote:
>>
>> >
>> >
>> >sideband wrote:
>> >>
>> >> I remember reading, a few years ago, about longwire antennas... I seem
>> >> to remember reading how many wavelengths it took before SWR was no
>> >> longer an issue, but I've forgotten where I read it, and how many waves
>> >> it was. I'm considering this in lieu of the dipole which was
>> >> exhaustively discussed in an earlier thread.
>> >>
>> >> Does a longwire require a ground plane? How are they fed? Will I need a
>> >> balun or anything of the sort to use one? Will placing one on and/or
>> >> slightly under the surface of the ground affect its performance?
>> >>
>> >> Any help will be greatly appreciated. Many thanks in advance.
>> >>
>> >> 73's
>> >>
>> >> -SSB
>> >
>> > I think the length your thinking of is greater than 15 wave
>> >lengths. After about 15 wave lengths a longwire antenna becomes
>> >'aperiodic', and very broadbanded. You don't need a balun because
>> >a longwire is not a balanced antenna. You would need a variable
>> >harmonic filter to feed the antenna (tuner). You will also need
>> >a good ground system (depending on who you ask). A longwire
>> >'should' be as high as possible, not close to the ground and
>> >definitlely not under ground.
>> > Once you get above 4 - 6 wave lengths long it starts getting
>> >directional, but it has a very broad directional pattern. This
>> >pattern isn't too predictable, so 'aiming' a long wire is almost
>> >impossible.
>> > At 15 wave lengths, your talking about one long antenna. On
>> >10 meters, about 500 feet long, and on 160 meters, a bit over a
>> >mile and a half long. Can't squeeze that into my city lot...
>> > 'Doc
>>
>> SSB,

>>
>> You might be helped by two recent threads here called Project
>> Skywire and Loop Skywire. It is one type of longwire and the thread as
>> well as the compromises I had to make give you one approach for you
>> to consider. I'm sure the Old Timers here would tell you almost any ant.
>> is better than no antenna. What do you have now? I went from the
>> whip on my portable rx., to a 23ft. retractable to a 66ft. random wire, to
>> a 200ft. sorta loop. Each step has brought me substantial gains as well
>> as penalties (I heard LW best on the 23ft reel-in). Hope this helps.
>>
>> 73,
>>
>> Andrew
>> KG4JBM
>
>Andrew:
>
>Right now I'm running a Wilson Trucker 2000 clamped on the rail outside my
>basement apartment. It's close enough to a dummy load, except for the SWR.
>
>All these suggestions (except for the first, of course. It's an apartment, for
>pete's sake. I need to keep this nearly invisible) have been good, and given
>me food for thought...
>
>As soon as my check comes in next month, I think I'll spend some of my "fun"
>mondy on the antenna handbook, but you're all not going to get rid of me just
>'cause I have it. ::grin::
>
>73's
>
>-SSB
>
>

SSB,

I don't know if you'll consider this helpful or not.
You know what it's like when you've got a couple hours
to kill and so you dial up and start surfing the web only
to find that you've gone from link to link until you've no
idea where you are? (Happens to me all the time)<grin>

I'm positive that I've seen at least two sites out
there that do show indoor loops for HF and/or plans.
That's not much to go on. If I've time I'll look around
some myself. I have print-out for a BCB AM loop
around somewhere. I'm sure it's very possible to do it
for HF. Interference is another issue. You're in a gnd
floor apartment-- Maybe you've got a buddy on the
top floor? No. Maybe time to make a new friend.
<grin>

Andrew
KG4JBM

618. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20000820171422.24149.00000912@ng-me1.aol.com>
Source record: 182086

Why do I get this mental image of Nathan as resembling the character Charles emerson Winchester III, as portrayed on MASH?

619. Re: Matching coil

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39A03800.9DB7C429@GTE.net>
Source record: 182087

Sonny wrote:

> Howdy Guys
> I have a Valor 40m whip that has a SWR of 1:6 to 1
> I had to wind a coil around a 2 inch piece of PVC pipe.
> I used number 14 bare copper and wound the coil using
> string trimmer line as a spacer and when the glue dryad
> I remover the line for a evenly spaced coil .
> It works ,but its sort of big .
> Can you guys give me so better ideas on making a coil ?
>
> Thanks
> 73 de ke4sll

Instead of using a coil you can use a variable capacitor to ground- you will need to increase the length of the tip in order to make the antenna look inductive. Start off with a 365pF variable and adjust it and the antenna tip until you obtain a match. Then substitue a fixed cap (hi voltage) in place of the variable.

Dale W4OP

620. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39a0526c_4@news1.prserv.net>
Source record: 182088

Group:
The rate of dissipation of acetic acid from curing RTV is dependent on the cross section thickness. Thin sections, like coating a connector when left to cure fully, are often not corrosive. Potting something and then immediately putting it in a sealed box guarantees that the acid will be around long enough to cause major trouble. So, it is the thickness and exposure, and both anecdotal comments are likely correct. I have experienced both conditions with Dow Corning 732 over the years. I also have found that the non acetic acid types like Dow 734 and 3140 are not as physically robust as the 732, and suffer mechanical damage if not protected by a jacket.

--
Crazy George

621. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A051F4.C5249B7@cac.net>
Source record: 182089

> I'm positive that I've seen at least two sites out
> there that do show indoor loops for HF and/or plans.
> That's not much to go on. If I've time I'll look around
> some myself. I have print-out for a BCB AM loop
> around somewhere. I'm sure it's very possible to do it
> for HF. Interference is another issue. You're in a gnd
> floor apartment-- Maybe you've got a buddy on the
> top floor? No. Maybe time to make a new friend.
> <grin>
>
> Andrew
> KG4JBM

Andrew:

Actually, my neighbors and I don't speak much. Everyone pretty much keeps to themselves, which is one of the reasons I like this place so much. It's also not just a ground floor apartment.. it's below ground. The top of the ceiling inside the apartmentis maybe 8 inches off the ground, tops. Maybe I could use the rain gutters to run some coax up to the roof, and run a loop or something around the edge of the eaves, or maybe use the raingutter itself as an antenna.

I don't know... I'm just looking for the easiest to execute, yet most efficient antenna design I can possibly get while still keeping in mind that it needs to be nearly invisible and the fact that I don't move around so well. All of your ideas have been wonderful, and I greatly appreciate all of the constructive input you and others here on this NG have offered. I suppose I've just got to kick it around in my head a bit and see what falls out. (Hopefully it won't be that plate!)

73's

-SSB

622. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A0567F.710826F0@oio.net>
Source record: 182090

Jim Bo,
Don't bother, it doesn't work. I think QST had something
on this a bunch of years ago, disproving the whole thing. It
still crops up now and then, and is still 'garbage'.
'Doc

623. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: n4zou@my-deja.com
Message-ID: <8npmcn$he1$1@nnrp1.deja.com>
Source record: 182091

In article <2olupsk1ej0alama68qnpeh19gps5u4hu2@4ax.com>,
Duane Smith <jwbest@earthlink.net> wrote:
> The 40 meter capacitor on my HF6V is broken. Does Butternut
> have a web page? Anyone know the value of the capacitor? I would
> even take one off of a junked Butternut. Thanks for any help.
>
> Jim N7CLV
> jwbest@earthlink.net
>
Butternut antenna's are now built by Bencher. The address for manuals and information is http://www.bencher.com/ant_select.html . You can download the manual free of charge. If you can't get the door knob capacitor required from Bencher you could order one from some other company that offers these capacitors for sell. If I remember right it's a 67 pF capacitor. While your at it look at http://n4zou.homestead.com/files/butternut.htm . Here you will find information on building a remote tuner for your Butternut vertical. the tuner is very simple, it is only a motor driven capacitor placed across the 80 meter coil. As the bandwidth is only around 80 KHz on 80 meters you wont be able to use the antenna for the entire 80/75 meter band. With the remote tuner installed on the element of the Butternut antenna you can tune that 80 KHz anywhere in the 80/75 meter band that you would like to operate with a simple control box in your shack. It also has an effect on 40 meters and allows you to tune that band also. All the information is printable and you may save it to your system to view off line as you like. 73 and good luck.

Sent via Deja.com http://www.deja.com/
Before you buy.

624. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A058A0.63DA8895@oio.net>
Source record: 182092

rattlehead,
For what it's worth, it sounds like the problem is in the
antenna switch. Does the switch ground the unused position?
If it does, can you 'unground' or 'unshort' the vertical when
you switch out of it's position? If the switch doesn't
short or ground the unused positions, try grounding them.
If that doesn't help, well... don't connect the vert.
'Doc

625. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A058B4.C5AAEB8D@oio.net>
Source record: 182093

rattlehead,
For what it's worth, it sounds like the problem is in the
antenna switch. Does the switch ground the unused position?
If it does, can you 'unground' or 'unshort' the vertical when
you switch out of it's position? If the switch doesn't
short or ground the unused positions, try grounding them.
If that doesn't help, well... don't connect the vert.
'Doc
PS - Not a very good solution, huh?

626. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A05D79.E6B3FC87@cac.net>
Source record: 182094

'Doc wrote:

> rattlehead,
> For what it's worth, it sounds like the problem is in the
> antenna switch. Does the switch ground the unused position?
> If it does, can you 'unground' or 'unshort' the vertical when
> you switch out of it's position? If the switch doesn't
> short or ground the unused positions, try grounding them.
> If that doesn't help, well... don't connect the vert.
> 'Doc
> PS - Not a very good solution, huh?

Doc:

Well, it's better than being told it'd be the best solution to dig a
hole 1600 meters deep and bury the dipole down there... ::grin::

I know it wasn't you. Your response here was certainly more helpful than
that other response in that other thread...

73's

-SSB

627. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8npmc9$c54$1@heap.juniper.net>
Source record: 182095
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Ian White, G3SEK <g3sek@ifwtech.com> wrote:
>Dennis Ferguson wrote:
>>Since the DSP is doing the last stage of IF filtering itself it will
>>hence also need to drive the S meter itself based on knowledge of the gain
>>it is applying to the analog stages plus the measured (digital) signal
>>strength after the final filtering is done. Since it inherently needs
>>to know all of this with reasonable precision anyway, an accurate S meter
>>(calibrated to whatever S-unit standard the manufacturer chooses) seems
>>to sort of automatically fall out.
>>
>
> ...and yet it doesn't seem to help.

It actually does help in some sense. It helps answer the (mostly
academic) question of whether manufacturers build useless S meters
because it is too hard to build accurate ones, or whether they build
useless S meters because the manufacturer doesn't give a crap about
the accuracy of the S meter. With the final IF implemented with DSP
I don't think the problem is that it is overly difficult to build an
accurate S meter.

>These are the results for the new IC-756PRO, taken from an RSGB lab
>review (values below S9 are averages of measurements taken every 2 S-
>points):
>
>S1-S3 1.9dB
>S3-S5 2.6dB
>S5-S7 2.5dB
>S7-S9 2.4dB
>S9 - S9+20 13.0dB
>+20 - +40 22.1dB
>+40 - +60 17.9dB

This is neat. I can think of two obvious methods that could have
been employed to achieve this result. They could have gone to the
trouble of explicitly programming the DSP to produce S meter readings
that are compatible with their previous products, or they could have
just left the S meter attached to the analog AGC circuit. In the
latter case the S meter may now be responsive to signals outside the
digital passband, making it even worse than it was before.

In any case, I don't disagree that most S meters are mostly useless.
I was only commenting on the relative difficulty or ease of making
them useful.

Dennis Ferguson

628. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39A084A2.F24C76CB@qth.com>
Source record: 182096
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Your antron is becoming a tuning wand to the sloper....you will have to
reposition one or the other...73 Murray

rattlehead@my-deja.com wrote:

> I just recently re-tuned by 75 meter quarter wave sloper to work on a
> higher part of 75 meters (from about 3675 to about 3900). I did this
> with the aid of an MFJ antenna analyzer. Everything went fine with the
> usual "tune, cut and shorten the antenna, and retune" recipie. Then I
> hooked the coax back into my 2-position antenna switch box and all was
> working well.
>
> then I plugged up my other HF antenna (a half wave 10 meter vertical)
> back into the other position of the antenna swtchbox, and this action
> alone made the resonant frequency of my sloper drop by about 90 to 100
> kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax
> out of the 2-pos switch box, the resonant frequency of the sloper climbs
> back from 3810 back up to 3900.
>
> one friend suggested that maybe my sloper isn't grounded well enough
> (the tower/pole a slower is mounted to is suppose to act, itself, as
> the counterpoise of the antenna). I would like the thoughts of everybody
> else out there.
>
> My half wave vertical is an antron-99, and a couple of feet below the
> place it is mounted to is where I have the top of the 75/80 meter sloper
> mounted. Both coaxs run along side one another down the mast and tower
> to my station, for further information.
>
> --
> "As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

[One or more binary attachments are retained only in the source text.]

629. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A077E9.AF35E33D@cac.net>
Source record: 182097

Arrow146 wrote:

> >Subject: Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK
> >From: n8wwm@aol.com (N8wwm)
> >Date: Sun, Aug 20, 2000 3:14 PM
> >Message-id: <20000820171422.24149.00000912@ng-me1.aol.com>
> >
> >Why do I get this mental image of Nathan as resembling the character Charles
> >emerson Winchester III, as portrayed on MASH?
>
> I thought more like Frank, He always was trying to get
> someone court marshaled.

If it's Frank, then who's his "Hot Lips"?

::cackle

-SSB

630. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Jim Bo <jbollit@ix.netcom.com>
Message-ID: <39A07DBA.DDE90D45@ix.netcom.com>
Source record: 182098

I recall the article in 73 or Ham Radio Magazine. They did some
"explanation" on the theory, however I do not recall what the theory was.
The article was in the early 1980's.

Jim
*

Jim Bo wrote:

> Hello,
>
> I read many many years ago about a method of grounding a ham radio
> transmitter that is located on the second floor of a house.
>
> It involved using coax. The dc path for the ground was the center
> conductor. The "different" part of this method involved taking 0.001
> microfarad caps and connecting them at each end of the coax from the
> outer braid to the center conductor. There was no dc connection to the
> braid, but at each end the braid was connected to the center conductor
> via the 0.001 microfarad caps.
>
> This was supposed to make a better rf ground for the radio located on
> the second floor.
>
> Does this make sense? What principal is in effect that makes it "sense?
>
> Thanks in advance.
>
> Jim
> *

631. Township problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <8npv9fulh1@slb6.atl.mindspring.net>
Source record: 182099

These dirtballs are still breaking my chops about a 60 ft SWL diplole but will let this scu**bag do this again !
NOW I AM HOSTILE !
Flag pole on the way !

http://www.newsday.com/coverage/current/news/sunday/nd2799.htm

Board OKs Puffy's Annual Bash

by Seth Stern
Staff Writer

Hamptons A-listers and celebrity gawkers take heart: Rap mogul Sean (Puffy) Combs' Labor Day party will take place after all.

The East Hampton town board reversed itself Thursday night and approved a permit request for Combs' annual bash that last year featured live salsa music, a Mr. Softee ice cream truck and a "Who's Who" of the Hamptons.

Town Board member Diana Weir, whose vote in the 3-2 decision tipped the scale in Combs' favor, said she changed her mind when Combs' attorney moved up the close of the festivities from 1 a.m. to 10 p.m. The board initially rejected Combs' application at a meeting Tuesday night. "He made an accommodation, and I figured we'll give him this chance," Weir said Friday. "If he violates it, I doubt he'll get any more permits." Town regulations mandate board approval for gatherings of 250 or more, said Town Supervisor Jay Schneiderman.

In past years, neighbors complained that guests such as Jennifer Lopez, Martha Stewart and Susan Lucci, along with hordes of their fans who linger outside, clog local roads and stay noisy late into the night.

Combs' next-door neighbor Debra Lobel, who said party preparations make it difficult to sleep for days and interfere with her own anniversary celebrations, criticized the decision.

"The town board has folded even though he's had violations and he's been a most inconsiderate neighbor," Lobel said. "They are bending over backwards to give the celebrity what he wants to the detriment of the quiet enjoyment of the neighbors." Combs paid a $2,000 fine following his 1999 July 4 weekend party when festivities continued past the original 10 p.m. ending time.

Combs' attorney, Stuyvesant Wainwright IV, said his client wanted to "be reasonable and keep the disturbance to his neighbors to a minimum." Last year, the board also initially rejected his application for the Labor Day weekend party, but reversed itself after he made concessions.

632. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: gcouger <gcouger@NoXSPAM.mercury.rfdata.net>
Message-ID: <Ps%n5.7840$uX.18951@newsfeed.slurp.net>
Source record: 182100

Juan,

A GPS will give you a better time signal. A Rockwell Jupiter puts out a 1
second pulse, a 10Khz
pulse and spits out the time in ASCII every second.
--
Gordon W5RED
G. C. Couger gcouger@couger.com Stillwater, OK

"Juan" <jherrero@videotron.ca> wrote in message
news:39a19265.342802381@news.videotron.ca...
: Hi
: I have an small astronomical observatory 100Km North of Ottawa. In
: order to measure asteroid occultations, reduce orbits and time other
: astronomical events. I need to receive the UTC time signal. To that
: end. I purchased a Grundig YB400PE radio. With it. I can best receive
: channels CHU at 3330 and 7335. With transmitter located at about 110Km
: South of the observatory.
: Here is the problem. When I engage the telescope control drive. The
: 24V pulse modulated stepper motors create an electronic clatter that
: completely overrides the UTC signal. So I've been thinking of running
: a coaxial wire to an antenna away from the observatory. When I started
: to investigate the subject in the net. It quickly became apparent that
: antenna design is a complex mater. Thus I wonder If some of you
: experts could provide a simple antenna design to solve this
: astronomer's noisy problem. Please note that although I have a decent
: knowledge of electronics. I am a complete neophyte when it comes to
: antennas.
: Note: I have lots of trees around to use as mast if needed.
:
:
: Thanks in advance.
: Juan Herrero
: Astronomy In The Great White North
: http://pages.infinit.net/jherrero/

633. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Will Rogers <nospamw4wlrnospam@nospambellsouth.netnospam>
Message-ID: <JK%n5.1326$vO4.213232@news3.mia>
Source record: 182101

Hi!

As I recall, the claim was that the coax and capacitors made the ground lead look shorter than it was..... something like that

73

Will Rogers

"Tom W8JI" <2w8ji@contesting.com> wrote in message news:39a07f15.1722128@news.akorn.net...
> On Sun, 20 Aug 2000 12:39:02 -0700, Jim Bo <jbollit@ix.netcom.com>
> wrote:
>
> >Hello,
> >
> >I read many many years ago about a method of grounding a ham radio
> >transmitter that is located on the second floor of a house.
> >
> >It involved using coax. The dc path for the ground was the center
> >conductor. The "different" part of this method involved taking 0.001
> >microfarad caps and connecting them at each end of the coax from the
> >outer braid to the center conductor. There was no dc connection to the
> >braid, but at each end the braid was connected to the center conductor
> >via the 0.001 microfarad caps.
> >
> >This was supposed to make a better rf ground for the radio located on
> >the second floor.
> >
> >Does this make sense? What principal is in effect that makes it "sense?
> >
> >Thanks in advance.
>
> That article appeared in 73 Magazine, not QST.
>
> It was a serious article. 73 Magazine is the source of some of the
> worse possible information in the world, because they print anything
> that falls on the desk.
>
> That idea is absolute rubbish.
>
> 73 Tom

634. Re: Matching coil

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A09417.7819BADE@oio.net>
Source record: 182102

Sonny wrote:
>
> Howdy Guys
> I have a Valor 40m whip that has a SWR of 1:6 to 1
> I had to wind a coil around a 2 inch piece of PVC pipe.
> I used number 14 bare copper and wound the coil using
> string trimmer line as a spacer and when the glue dryad
> I remover the line for a evenly spaced coil .
> It works ,but its sort of big .
> Can you guys give me so better ideas on making a coil ?
>
> Thanks
> 73 de ke4sll

Try using B&W coil stock. 2-3" diameter, 2-4 long, 6 turns per
inch.
'Doc

635. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A09517.F3E3717B@oio.net>
Source record: 182103

Tom W8JI wrote:
>
----clipped-----
> Hey Doc, read the opening thread again.
>
> 1.) He has a sloper.
>
> 2.) Slopers depend on the tower and anything connected to the tower
> for a ground.
>
> 3.) Anything that cnages the ground will detune the sloper, such as
> connecting a feedline and antenna on or near the tower to the station
> ground.
>
> 4.) If the switch was bad, the RFI (from no ground) or the SWR change
> (from two antennas being paralleled would be great.
>
> 5.) I'd wager if he touches the shield of the Antron antenna to the
> switch or any other ground in the shack, his sloper will change
> frequency.
>
> 6.) Slopers are often problems like this, because the work against the
> tower and anything connected to or near the tower.
>
> 73 Tom
> 4.)

I did read the original, and I still don't see where what I
said isn't a legitimate 'try' at curing the problem.
'Doc

636. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A095F3.C54E0DCC@oio.net>
Source record: 182104

rattlehead@my-deja.com wrote:
>
-----clipped-----
>
> heh, well, not a convenient one, BUT, any solution that works is a good
> one. somebody else mentioned this possibility; could I solve the problem
> by just grounding the body of the switchbox itself maybe? I don't know
> how I could arrange it such that the unused position is re-directed to
> ground, without manually doing so each time; and in this case, I might
> as well do as you say, and just unscrew the vertical's coax.
>
> --
> "As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Grounding unused contacts is usually built into the switch. If it
isn't made that way to start with, it's very difficult to change it.
It
will probably affect your slopper, but I'd ground the antenna switch,
May
not make much difference as far as the antennas are concerned, but
does
make a difference for safety.
'Doc

637. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39A0B180.3FECE021@mindspring.com>
Source record: 182105

I am about to get pounced on for going off-topic, I know. Political leaders should set examples of social, or public morality. Personal, or private morality is nice, really beside the point. The failure of the government and the public to understand the difference hold sus back and leads us into a lot of quagmires of bad policy. I don't think social morality precludes the personal, but it amazes me again and again that the rhetoric calling for a return (from where, from when?) to private morals in public office offers as its obverse a venal, self-interested, amoral (as in no morals, good or bad: business is business after all) view. Good thing the electorate isn't as dumb or malleable as its reputation.

de Will KD7BFX

Pete wrote:
>
> If you vote for al gore and he wins, and this country needs money for his
> programs, we can always get it from the Buddhist Monks to help this country
> out. Don't be ridiculous Sir, do really think there is a choice if we want
> this country back on track morally? There is no question who is the right
> person who should lead this country, Bush of course! We need to put Slick
> Willy and the Ozone Man out to pasture, and forget about them.
>
> "Will" <wcwhite@mindspring.com> wrote in message
> news:399FBA1C.33A2A06B@mindspring.com...
> > As Harry Truman put it at the 1948 Democratic convention: "If you want
> > to live like a Republican, vote for a Democrat."
> >
> > de Will KD7BFX

638. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Jim Bo <jbollit@ix.netcom.com>
Message-ID: <39A0B54E.BAAE8443@ix.netcom.com>
Source record: 182106

I seem to recall the same thing. This "technique" was to make the ground lead look shorter at RF so you would have, in effect, the radio "close" to the ground rod.

Can anyone model this to determine if there is anything to it??

Tnx

Jim
*

Will Rogers wrote:

> Hi!
>
> As I recall, the claim was that the coax and capacitors made the ground lead
> look shorter than it was..... something like that
>
> 73
>
> Will Rogers
>
> "Tom W8JI" <2w8ji@contesting.com> wrote in message
> news:39a07f15.1722128@news.akorn.net...
> > On Sun, 20 Aug 2000 12:39:02 -0700, Jim Bo <jbollit@ix.netcom.com>
> > wrote:
> >
> > >Hello,
> > >
> > >I read many many years ago about a method of grounding a ham radio
> > >transmitter that is located on the second floor of a house.
> > >
> > >It involved using coax. The dc path for the ground was the center
> > >conductor. The "different" part of this method involved taking 0.001
> > >microfarad caps and connecting them at each end of the coax from the
> > >outer braid to the center conductor. There was no dc connection to the
> > >braid, but at each end the braid was connected to the center conductor
> > >via the 0.001 microfarad caps.
> > >
> > >This was supposed to make a better rf ground for the radio located on
> > >the second floor.
> > >
> > >Does this make sense? What principal is in effect that makes it "sense?
> > >
> > >Thanks in advance.
> >

> > That article appeared in 73 Magazine, not QST.
> >
> > It was a serious article. 73 Magazine is the source of some of the
> > worse possible information in the world, because they print anything
> > that falls on the desk.
> >
> > That idea is absolute rubbish.
> >
> > 73 Tom

639. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8nqhmprvh1@nntp9.atl.mindspring.net>
Source record: 182107

A tuner would probably not do you much good. A preselector might help but before buying or building one of those, put an attenuator in line. It sounds like you are having overload problems. Take a look at my website, there are a few thins there that might interest you.
--
CW
KC7NOD
Web Page http://www.cw.arjika.com

"Set'em up Joe" <cathexis@erols.com> wrote in message news:399f3900.79916057@news.erols.com...
> Greetings,
>
> First of all, Big THX to all who replied regardless of
> your views on horizontal loops. I don't have the knowledge
> or experience to debate tech. with you but I would like to
> share some preliminary results (very preliminary).
>
> The idea was to try replacing a 66ft. random wire
> with *something* like the "Loop Skywire" proj. as per A.R.R.L.
> Hndbnk. Intended usage is for recieve only. Terminus is a RS
> DX-392 which accepts any antenna as long as you can squeeze
> it into a simple phono plug jack. No separate GND. jack is offered.
> Proper GND for the antenna would mean disconnect ant. after use
> and hook to more proper ground rod,etc. The phono jack leaves
> you with a gnd wire you either hook to external gnd or let dangle.
> Posi. pole of course plugs into radio. At least, that's my understanding.
>
> The "Loop" was hardly a loop. Basically, it's wire only(no insulators)
> thrown up through 4 trees and crossing my roof twice (close, but no contact).
> The geometry is more like a trapazoid. The following measurements are approx.
> Perimeter: 220ft. Base: 90ft.; Then 60/66/40 on around. Yes. I know, numbers
> don't exactly add up. Finished at twilight so some wire I could no longer see.
> Anyway, pretty close to half way betw'n 1wavelength 40M vs. 80M. This was
> close to what I wanted. Perhaps even worse to you purists: First thing I
> discoverd about slingshoting wire into trees?? Altitude varies hugely from tree
> to tree in terms of what branches are "do-able". So therefore this loop is
> slightly folded vertically as well. North and South it goes down to 20ft/25ft.

> East it rises to 30 ft. West it goes at least to 50+ feet.
>
> Hook up?? Not much. It was dark by then. Still, I had to know, Dud
> or not? With 15 to 20 ft. of ends dragging on the ground, I just stripped
the
> ends without trimming and twisted (no solder, not even elec. tape) it
onto
> my phono plug leads. Bare wire leads left lying on the carport. Sloppy as
heck.
>
> Results? OUTSTANDING ! To be honest, I've no idea what the prop.
> report is for today; I've been too busy to check. Weather is good here:
Cool and
> clear. Moderate clouds, temp 68F. But man what a sound! First of all Radio
> Kuwait. Before: Max. Gain, Half volume for easy listening. Tonite MINIMUM
gain
> and low vol. and it's booming. The "strength indicator" on the DX-392 goes
from
> S-1 to S-7 (just a led display folks). Radio Kuwait was at S-5 on min.
gain. A
> ham from Brazil on 40M was "S-3" on min. gain, half vol. for easy
listening.
> Same thing for a ham from Riverside, CA. on 20M. Radio Sweden 13675 (I
think)
> S-5 and booming, same thing. Finally heard some reasonably clear QSO's on
> 80M. 'Bout time. How would a anenna. tuner help??
>
> In fact, my only initial complaint is that sometimes it seems too
> strong. That is, signals before which were fainter were without
competition.
> Now it seems like there *may* be more RFI from nearby (freq.-wise)
stations
> bleeding into other stations.Like you'd gone from narrow-band to wide band
> tuning. Once or twice I wished I could turn down the gain even further.
Also,
> LW is useless now; so much AM BCB imaging it sounds like a car radio. Is
it
> a true loop? Or just a longer, higher random wire? Whatever it is I'm
seeing big
> initial gains and am heading right back out there after this post to see
just
> what else it might give me. I'n gonna DX tonite!
>
> Sincere thx. to you all,
>
> Andrew
> KG4JBM
>
> I'll post more when I know more. Your feedback is welcome and wished for.

640. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399FC746.BA227F0F@oio.net>
Source record: 182119

"Jason S. Hulet" wrote:
>
> Hello,
>
> Seems I have heard may negitive comments on the Outbacker HF Mobile antennas.
> Anyone out there that actually like the Outbacker for HF Mobile operation? Is
> it really the much worst then say a Pro-am whip or Ham stick?
>
> Thanks
>
> Jason S. Hulet
> W1WOW

Jason,
The 'OutBacker' is probably no worse and no better than a
'Pro-Am' or 'HamStick', in performance. Price is an entirely
different matter! The 'OutBacker' may be a fine antenna, but
not $300-400.00 worth better than either of the other two.
'Doc

641. Re: Need Motor Cap for HD-73 Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <8nogsk$o7v$1@freenet9.carleton.ca>
Source record: 182120

"BHL" (philoxen@hotmail.com) writes:
> Need the motor cap for my Alliance HD - 73 - 1 Rotor. It is listed as C3,
> 155 - 189 mfd @ 50WV DC. Norm's is out of them. Any help or leads to help
> appreciated. BHL philoxeny@hotmail.com
>
Try a repair shop for electric motors.
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr
Check out the proposed Radio Regs at:
http://www.tc.gc.ca/GMDSS/English/intro_e.htm

642. Re: Best Satelitt antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Claus, DF8GH" <DF8GH@t-online.de>
Message-ID: <399FCCF4.B05334DA@t-online.de>
Source record: 182121

AM-SAT wrote:
>
> Tips for the best Antennas for Satelitte ?? Need a good antenna for 70 + 2,
> Circular polaritet
>
> Ho have best quality, etc. ???
>
> txn for help

Take a look at:

http://members.aol.com/k5oe/index.htm

there you can find a lot of satant stuff for homebrewing

73 de Claus

643. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399FCCB4.1F216880@attglobal.net>
Source record: 182122

I guess I needed to clarify.... I'm talking about the ground lug on the back
of the Kenwood and the tuner..... sorry if I wasn't clear.

Dan Richardson wrote:

> On Sat, 19 Aug 2000 19:39:25 -0400, Wayne Grauel
> <wgvideo@attglobal.net> wrote:
>
> >Hi folks. I just set up my ham shack using a Kenwood ts-440s with a
> >dentron mt3000a tuner going to w G5RV. I have a good size spool if #12
> >AGW stranded copper (insulated). Will that be a sufficient ground.
> >it's going about 20 feet or so down to and across the floor joists and
> >out to the ground rod that the electrical system is hooked to. there's
> >no closer route to the outside and the ground rod is right there so
> >there really aren't any other options. Unless you're going to tell me
> >to sink a separate rod. I don't know so that's why I'm asking.
> >
> Wayne,
>
> If it is a RF ground you are seeking then a ground rod is a poor
> choice. Let along a single one.....
>
> Suggest you do a search in Deja View on the subject... You'll find
> many bit of good information there.
>
> 73
> Danny, K6MHE

644. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399FCDF8.42189767@attglobal.net>
Source record: 182123

'Doc wrote:

> Wayne,
> I wouldn't worry too much about an RF ground, not being on the
> ground floor, it would be 'tuff' to do. Just make sure you have
> an electrical ground and forget it unless you have RFI problems.
> You may or may not have problems by 'looping' the twin-lead
> portion of the G5RV. It should run clear of surrounding objects.
> But, as they say, 'if it works, don't fix it'. By the way, if
> that Dentron3000 won't tune it, it can't be tuned!
> 'Doc

Doc, electrical ground (the lug on the back of the set) is the one I'm speaking of. If there isn't one hooked up, I will get RF around the equipment in the shack and a loss of performance... no?

... I wonder because in the ARRL Bible (which should have some more common knowledge because it's what a new ham buys first) it says not to hook it to water pipes (we're on a well anyway), so I was curious about the wire size needed (12 awg), and if a common ground rod shared between the house AC and my radio was a problem.

645. Clarification of my question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399FCEF6.66815706@attglobal.net>
Source record: 182124

I'm not talking about a ground plane here for the antenna, I'm addressing that ground lug on the back of the radio and the tuner. Plan on using #12 stranded, insulated, copper wire. I was going to send this out (about 20 feet) to a common ground rod that also serves as the AC ground for the house electrical system.

Sorry if i wasn't clear.

Wayne

646. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399FCE34.CB169D5@oio.net>
Source record: 182125

sideband wrote:
>
> I remember reading, a few years ago, about longwire antennas... I seem
> to remember reading how many wavelengths it took before SWR was no
> longer an issue, but I've forgotten where I read it, and how many waves
> it was. I'm considering this in lieu of the dipole which was
> exhaustively discussed in an earlier thread.
>
> Does a longwire require a ground plane? How are they fed? Will I need a
> balun or anything of the sort to use one? Will placing one on and/or
> slightly under the surface of the ground affect its performance?
>
> Any help will be greatly appreciated. Many thanks in advance.
>
> 73's
>
> -SSB

I think the length your thinking of is greater than 15 wave
lengths. After about 15 wave lengths a longwire antenna becomes
'aperiodic', and very broadbanded. You don't need a balun because
a longwire is not a balanced antenna. You would need a variable
harmonic filter to feed the antenna (tuner). You will also need
a good ground system (depending on who you ask). A longwire
'should' be as high as possible, not close to the ground and
definitlely not under ground.
Once you get above 4 - 6 wave lengths long it starts getting
directional, but it has a very broad directional pattern. This
pattern isn't too predictable, so 'aiming' a long wire is almost
impossible.
At 15 wave lengths, your talking about one long antenna. On
10 meters, about 500 feet long, and on 160 meters, a bit over a
mile and a half long. Can't squeeze that into my city lot...
'Doc

647. AMEN to that stupid post!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <399FD351.E3878CC7@attglobal.net>
Source record: 182126

AMEN... I'm new to this also (if you're not) . Makes you think that ham operators are a bunch of assholes sometimes... not like the good old days. My dad loved radios and planted the seed for me. The impressions I had of Ham operators was one of people who people who were professional to the degree that they accomplished their goals, and were polite. Not like the world of CB Radio today, but rather a code of ethics that seemed to adorn people who were into such a demanding hobby. OK... I didn't have to copy 15 WPM to get my General ticket, but I passed the Tech Plus years ago. Maybe if I waited till I retired, I would have had the time to devote to bringing my code up to 15 WPM, but I have to work long hours so My wife can stay home and raise my two boys. Some things have a priority, and admit it.... things were different back in the good old days, life was kinder then, so If you've all got a grudge because someone has newly acquired a license or an upgrade... (this is what it sounds like so forgive me if I'm wrong) I suggest you get over it. I would suggest that the radio companies are loving life right now, and you guys who want to buy really expensive equipment should be darned glad there's some new guy out there to take it off your hands!

And, then again, maybe this isn't the case... maybe the person who made that ridiculous reply (I don't know anything compared to you guys but I do know he was giving this guy a line of garbage) is one of those CB'rs become HAMS. Even I dread that and don't want to see that. 2 meters is full of them.

What ever the case, people like that certainly stain the images of the rest of us who just want to be in the spirit of ham radio..... or did that die a generation ago!

sideband wrote:

> "William F. Hagen" wrote:
>
> > The best way to handle an antenna like this is to dig a hole as deep as
> > the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
> > wire as a vertical longwire. There will be low swr and max power
> > transfer to the antenna.
> >
> > sideband wrote:
> > >
> > > I remember reading, a few years ago, about longwire antennas... I seem
> > > to remember reading how many wavelengths it took before SWR was no
> > > longer an issue, but I've forgotten where I read it, and how many waves
> > > it was. I'm considering this in lieu of the dipole which was
> > > exhaustively discussed in an earlier thread.
> > >
> > > Does a longwire require a ground plane? How are they fed? Will I need a

> > > balun or anything of the sort to use one? Will placing one on and/or
> > > slightly under the surface of the ground affect its performance?
> > >
> > > Any help will be greatly appreciated. Many thanks in advance.
> > >
> > > 73's
> > >
> > > -SSB
>
> So you're proposing I dig a 1600 meter deep hole for a 10 & 11 meter
> longwire? Jaright. What brings this kind of post on? Thinks like this really
> turn people off to making their own antennae, and to wanting to study hard,
> overcome slight dyslexia, and become a licensed Amateur operator.
>
> Any serious suggestions/answers out there?
>
> -SSB

648. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: kg4fet@aol.com
Message-ID: <20000820085425.10092.00000001@ng-cq1.aol.com>
Source record: 182127

>Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
>articles on the ARRL site on loop antenna projects. The loop antennas
>seem to offer decent performance for an apartment, and the fact that
>loop antennas are balanced eliminates the need for an RF ground.
>
>I should note that I don't want to buy a soldering iron (due to the
>fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
>or other dangerous equipment. Also, I have NO experience in
>homebrewing amateur radio equipment. Can I build a loop antenna using
>just simple tools like a screwdriver, hammer, and socket wrenches?
>
>--
>Jason Hsu, KB9PNZ
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason

Jason,
Here are a couple of suggestions for ya. Get with some of the local Hams, and find an Elmer to help you out. Another would be to take a basic electronics course at the local community collage. This won't cost a whole lot of money and It will make you alot more comfortable with not only an iron but with the workings of ham radio as a whole. I have a 3 soldering irons I use here and one of them is the trigger type that oly heats when you pull the trigger, it has a rapid cool down. This would be perfect for you as you would be working only on "BIG" connections not the insides of a rig. Give it some thought a soldering iron is probably the most used tool in antenna building, and the easiest way to learn how to use one is practice.
73 de KG4FET Sandor

649. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <8nokld$je7$1@slb1.atl.mindspring.net>
Source record: 182128
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Thanks for that insight on weight, Tom. I am working on a contest logging program and thought that that weight was the ratio of dot & dash/3 length.

I looked it up, and I believe that it is the ratio of dot to (dot + space) length.
Dash remains 3 times the dot length.

That should help improve the sending of the program. The web page for the program
can be seen at:
http://tomwagner.home.mindspring.com/n1mm.htm

Take a look, you might be interested.

73,
Tom - N1MM

Tom W8JI <2w8ji@contesting.com> wrote in message
news:399fa78d.2311816@news.akorn.net...
> On Sun, 20 Aug 2000 09:08:37 +0100, "Ian White, G3SEK"
> <G3SEK@ifwtech.com> wrote:
>
> >These are the results for the new IC-756PRO, taken from an RSGB lab
> >review (values below S9 are averages of measurements taken every 2 S-
> >points):
> >
> >S1-S3 1.9dB
> >S3-S5 2.6dB
> >S5-S7 2.5dB
> >S7-S9 2.4dB
> >S9 - S9+20 13.0dB
> >+20 - +40 22.1dB
> >+40 - +60 17.9dB
>
> What can you expect from engineers who think weight is the ratio
> between dot length and dash length?
>
> If they can't get the keyer correct, they sure aren't going to do the
> S meter correctly.
>
> 73 Tom

650. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <399fd6dc.120334653@news.erols.com>
Source record: 182129

On Sun, 20 Aug 2000 07:25:24 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>sideband wrote:
>>
>> I remember reading, a few years ago, about longwire antennas... I seem
>> to remember reading how many wavelengths it took before SWR was no
>> longer an issue, but I've forgotten where I read it, and how many waves
>> it was. I'm considering this in lieu of the dipole which was
>> exhaustively discussed in an earlier thread.
>>
>> Does a longwire require a ground plane? How are they fed? Will I need a
>> balun or anything of the sort to use one? Will placing one on and/or
>> slightly under the surface of the ground affect its performance?
>>
>> Any help will be greatly appreciated. Many thanks in advance.
>>
>> 73's
>>
>> -SSB
>
> I think the length your thinking of is greater than 15 wave
>lengths. After about 15 wave lengths a longwire antenna becomes
>'aperiodic', and very broadbanded. You don't need a balun because
>a longwire is not a balanced antenna. You would need a variable
>harmonic filter to feed the antenna (tuner). You will also need
>a good ground system (depending on who you ask). A longwire
>'should' be as high as possible, not close to the ground and
>definitlely not under ground.
> Once you get above 4 - 6 wave lengths long it starts getting
>directional, but it has a very broad directional pattern. This
>pattern isn't too predictable, so 'aiming' a long wire is almost
>impossible.
> At 15 wave lengths, your talking about one long antenna. On
>10 meters, about 500 feet long, and on 160 meters, a bit over a
>mile and a half long. Can't squeeze that into my city lot...
> 'Doc

SSB,

You might be helped by two recent threads here called Project
Skywire and Loop Skywire. It is one type of longwire and the thread as
well as the compromises I had to make give you one approach for you
to consider. I'm sure the Old Timers here would tell you almost any ant.

is better than no antenna. What do you have now? I went from the whip on my portable rx., to a 23ft. retractable to a 66ft. random wire, to a 200ft. sorta loop. Each step has brought me substantial gains as well as penalties (I heard LW best on the 23ft reel-in). Hope this helps.

73,

Andrew
KG4JBM

651. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <399fd90d.120432753@nntp.mindspring.com>
Source record: 182130

On 20 Aug 2000 10:29:22 GMT, jhulet@aol.com (Jason S. Hulet) wrote:

>Hello,
>
>Seems I have heard may negitive comments on the Outbacker HF Mobile antennas.
>Anyone out there that actually like the Outbacker for HF Mobile operation? Is
>it really the much worst then say a Pro-am whip or Ham stick?
>
>Thanks
>
>Jason S. Hulet
>W1WOW

Hi Jason,

I have an Outbacker for travel. It is significantly down in
performance from a bugcatcher or screwdriver but it is
much easier to carry and install on a rental car. Used with
fishing line guys it works just fine with a trunk lip mount.

It is more expensive than the hamstick option but it is much
better construction and more convenient than carrying numerous
sticks.

At the antenna shootout in Santa Barbara it was about 8 db
down from the screwdrivers etc. on 75M. This difference
is less on the higher bands. If you travel by air is it a solution
for the rental car.

73 Jerry KK5YY

652. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <399FF93B.62442DBE@qth.com>
Source record: 182131
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

HI Jason, Igot the same results from my survey...the most disturbing reply, said you must RETUNE the stinger everytime you change bands..that would be awful...let me know if you get any real DIRECT info...I never did...still would like to try it but my hamsticks are so cheap and easy and good....$300 for a whip seems high!!! plus I have to get the hi powered one...using 40 and 80, 100 watts wont cut it but 350 - 400 makes it very viable...sure would be nice to jump from 40 to 17 in the day time for a few minutes to see whats up!! 73 murray

"Jason S. Hulet" wrote:

> Hello,
>
> Seems I have heard may negitive comments on the Outbacker HF Mobile antennas.
> Anyone out there that actually like the Outbacker for HF Mobile operation? Is
> it really the much worst then say a Pro-am whip or Ham stick?
>
> Thanks
>
> Jason S. Hulet
> W1WOW

[One or more binary attachments are retained only in the source text.]

653. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <wcUvsAAwp9n5EwT8@ifwtech.demon.co.uk>
Source record: 182132
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Reg Edwards wrote:
>Ian, with a lab-measured range of only 62 dB between no
>indicated signal and receiver overload point, either the
>receiver under test was stone deaf to signals which would
>blast through an ordinary receiver well above the band
>noise, or the RSGB lab is too incompetent to undertake such
>trials. There's at least 40 dB missing from somewhere.
>
>If the lab reported very little wrong with the receiver then
>the latter explanation best fits the circumstances.

Always ready to believe the worst of other people, aren't you?

If you took the trouble to read the review yourself, before telling us
all about it, you would find that:

10dB S+N/N = 0.16uV
S1 on the meter = 1.6uV (both figures on SSB, 7MHz, preamp 1 in)

In other words a signal has to be about 30dB above the noise floor
before the S-meter will move past S1.

At the strong-signal end of the range, a receiver's performance will
degrade in several different ways, each defining its own separate
dynamic range above the noise floor. None of this has anything to do
with the S-meter having gone to maximum.

So the problem is entirely with the S-meter, not the rest of the
receiver... and it's certainly not with the RSGB reviewer, G3SJX, who
knows exactly what he is measuring.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

654. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Yt2fOTah25IfAz2lvw10nNI7ZZmP@4ax.com>
Source record: 182133

sideband <sideband@cac.net> wrote:

>"William F. Hagen" wrote:
>
>> The best way to handle an antenna like this is to dig a hole as deep as
>> the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
>> wire as a vertical longwire. There will be low swr and max power
>> transfer to the antenna.
>>
>> sideband wrote:
>> >
>> > I remember reading, a few years ago, about longwire antennas... I seem
>> > to remember reading how many wavelengths it took before SWR was no
>> > longer an issue, but I've forgotten where I read it, and how many waves
>> > it was. I'm considering this in lieu of the dipole which was
>> > exhaustively discussed in an earlier thread.
>> >
>> > Does a longwire require a ground plane? How are they fed? Will I need a
>> > balun or anything of the sort to use one? Will placing one on and/or
>> > slightly under the surface of the ground affect its performance?
>> >
>> > Any help will be greatly appreciated. Many thanks in advance.
>> >
>> > 73's
>> >
>> > -SSB
>
>So you're proposing I dig a 1600 meter deep hole for a 10 & 11 meter
>longwire? Jaright. What brings this kind of post on? Thinks like this really
>turn people off to making their own antennae, and to wanting to study hard,
>overcome slight dyslexia, and become a licensed Amateur operator.
>
>Any serious suggestions/answers out there?

His response was serious (theoretically) :-)

My most serious suggestion would be to invest 30 dollars or so in
either the ARRL Radio Amateur's Handbook, which has several chapters
on antenna theory and construction, or get the ARRL Antenna Handbook.
You're flailing in the dark here with really basic questions that can
easily be answered by studying one or two books.

These books will also hold you in good stead, in your studying for the
ham exams.

To check out the books, go to http:www.arrl.com and click on
"products."

Have a good day,

Bob
k5qwg
>
>-SSB
>
>
>

655. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <399fde9b.64406094@news.galilei.com>
Source record: 182134
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi Tom

I don't think my Benton Harbor Lunchboxes came anywhere near 100 amperes, hi hi......

Even my biggest rig an HW-101 with approx. 100 watts out wouldn't come anywhere near 100 amps, more like 1.1 amp tops, unless ohm's law is really screwed up.

I also think the clips would outlast the 26 guage copper magnet wire as well.

TTUL
Gary

656. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Mike <Mike@g3uof.worldonline.co.uk>
Message-ID: <399fe2da@news.server.worldonline.co.uk>
Source record: 182135

KC1DI <elbc@pivot.net> wrote in message
news:399fabad_2@news.cybertours.com...
>
> "Duane Smith" <jwbest@earthlink.net> wrote in message
> news:2olupsk1ej0alama68qnpeh19gps5u4hu2@4ax.com...
> > The 40 meter capacitor on my HF6V is broken. Does Butternut
> > have a web page? Anyone know the value of the capacitor? I would
> > even take one off of a junked Butternut. Thanks for any help.
> >
> > Jim N7CLV
> > jwbest@earthlink.net
> >
>
> Duane ,
>
> Butternut's home page is
> http://www.bencher.com/ant_select.html
> Buttenut is owned by Bencher corp.
>
> But I believe they have all the Parts in stock.
> 73 dave
>
>
>
> Try here.
http://www.mgs4u.com/president.htm

657. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <399fe076.64881854@news.galilei.com>
Source record: 182136
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi Ian

Some fears are quite REAL, no matter how rediculous they may seem to others, or sometimes to your own self.

Since I'm the scapegoat here today, I will use myself as an example. At one time (pre-35) I had so little fear of height that I had a part-time job replacing the lights on broadcast radio/tv towers. Once I crossed that 35 mark, I either wised up some or decided the best place for my feet were on the ground. However, I still had no fear of height.
Then when I was around 48 years old I had an accident, a new commercial ladder snapped and I fell over 35 feet to the ground below. I was not seriously injured, or at least I didn't think so, but something psycological snapped.
The next time I climbed a ladder, my hands froze to the ladder at about the 12 foot point. Being of sound mind I tried to climb back down the ladder, but my hands would not let go of the rungs. I'm even standing there talking to myself, boy this is stupid, let go you dang hands. They wouldn't! I finally took my feet off the rungs and just dangled by my hands, thinking they would tire eventually and let me drop to the ground. They didn't. Eventually, someone called the fire department who tilted the ladder over, when my feet touched the ground, my hands let go.
A little experimentation proved that I could go about 10 feet with no problems, over the course of a few years, that 10 feet had lowered itself to 8 feet. I even went to a shrink a few times to discuss the problem with him. In my line of work, it was a serious problem.
About 4 years ago, it happened again at only 6 feet, and I went through the dangling routine for over an hour with the tips of my toes touching the blades of grass on the ground and my hands would not let go, until someone tilted the ladder enough that my feet were planted on the ground. Needless to say, I was embarrassed moreso than ever and decided to retire from that field completely, before I was laughed out of it.

Now if our friend has a real FEAR of a soldering iron, it could be simply from lack of knowledge of the device and can learn it's safe operation, or it could be a real instilled FEAR that may prevent him from ever handling a soldering iron.

In either case, having a knowledge of the alternative methods at his disposal would be more beneficial than offering none, other than learning to use a soldering iron.

FWIW - we have built whole chassis using nothing more than a wire-wrap tool and no solder ever touched the entire radio. I know those days are long gone now, but it was still an alternative method.

TTUL
Gary

658. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8noog2lvc1@bob.news.rcn.net>
Source record: 182137

Tom W8JI <2w8ji@contesting.com> wrote in message
news:399fa6da.2133170@news.akorn.net...
>
> If the feeder is 1/2 wl long on 40, you only need to use a choke
> balun. You can the use an L network for 80 and 160.
>
> A single relay will switch the system, or you can use two feedlines.

> This idea is patent pending and I'll sue....oh never mind.

>
> 73 Tom

1: The choke balun construction eludes me, since balanced line
precludes winding the line into a choke as can be
done with coax. Ditto for placing beads over the balanced line, and I am
sure you are not talking about a 1/2-wave coaxial
4:1 choke balun. Give me a bone.

2: The relay is a DPDT, one set of contacts connects the feedline to the
balun, while the other set of contacts shunts the
line and goes to a tunable L match for 80/160 operation?

3: I can't see how you can use two feedlines without somesort of switching
relay in the mix, the two balanced feeders do have
to be shunted for 80/160?

Regarding the patent: First, you need a lawyer, some sort of private
forum, and a Website to promote it.

73

Pete

659. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <399fe51f.66074569@news.galilei.com>
Source record: 182138

Hi SSB

I won't be any help at all with longwires, because I have never in my 40 years as an Amateur been able to get one that worked even decently.

At one time I was in the right place at the right time and had use of an infantisimal longwire (read that as abandoned telegraph wire), it received better than any other antenna I had ever used, but TX was the pits, cutting the wire to resonance produced the best TX results with very little sacrifice in the RX.

Currently my very best antenna for 160 meters is a Linear Loaded Inverted Vee, which fits in the depth of my backyard of 40 feet. This may not be the best antenna for your location though!

Antenna's are wierd birds to say the least, what seems to work the best for one ham, fails miserably for another ham. I had a loop skywire that worked great, it was originally installed as a temporary antenna, but I was pleased with it's performance, took it down, beefed it up and installed it permanently, then it didn't work worth a hoot, took it back down looking for something wrong, put it back up in the exact same place, worked fine ever since. No reason was ever found for it not working when it was first put up as the beefed up model.

TTUL
Gary

660. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <399fe79c.66711754@news.galilei.com>
Source record: 182139

Hi Jason

I can't speak from personal experience, but if you want the comments made at a club meeting by the owner of one with all the expletives deleted, it would go something like; This --- ---- --- -- - ----- antenna cost a ---- site more than my old one and don't work worth a ----.

TTUL
Gary

661. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <xQRn5.3787$Nz4.191726@newsread1.prod.itd.earthlink.net>
Source record: 182140

Peter- while not an especially low cost solution, I use an SGC-230 automatic tuner at the base of my inverted L, which I use on 30, 40, 80, 160 meters. The 230s are often available at a good price on ebay or rec.radio.amateur.swap. Here are the pros and cons of that approach:

Pros:
1. Nearly flat SWR at the station end of the line with no manual tuning required
2. Wide excursions across the band does not require manual retuning

Cons:
1. You're limited to 200 watts by the tuner ratings
2. You need to run a control cable to the tuner (I use 8 conductor rotor cable for the SGC-230 Smart Pro)
3. The 230 must be used at the antenna feedpoint - no transmission line

There's at least one other automatic tuner - can't recall the name, but it's quite a bit cheaper and can apparently handle a transmission line to the antenna. I've used all sorts of relay switching schemes over the years with inverted L antennas, but find the automatic tuner route more desirable.

K8AC
Floyd Sense - Angier, NC
"Peter Bertini" <commquart@erols.com> wrote in message news:8nna6d$a44$1@bob.news.rcn.net...
> Any suggestions on the tuning box... Did you use a balanced tuner or did
> you use a balun on the ladder line...
> I assume I should make my own ladder line out of number 10 copper with some
> decent ceramic spreaders.
>
> Pete
>

662. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39A0118C.87D85B75@dvol.com>
Source record: 182141

sideband wrote:

> I remember reading, a few years ago, about longwire antennas... I seem
> to remember reading how many wavelengths it took before SWR was no
> longer an issue, but I've forgotten where I read it, and how many waves
> it was. I'm considering this in lieu of the dipole which was
> exhaustively discussed in an earlier thread.
>
> Does a longwire require a ground plane? How are they fed? Will I need a
> balun or anything of the sort to use one? Will placing one on and/or
> slightly under the surface of the ground affect its performance?

>
Yes, installing an antenna underground will have a "sigfnificant effect on
it's performance". ???! Very long traveling wave antennas like Beverages
are installed close to the ground but are very directional and inefficient.

>
>
> Any help will be greatly appreciated. Many thanks in advance.
>
> 73's
>
> -SSB

>
My current "shack" is located at one of my brother's home which is a large
property loaded with tall old trees. I used a bow & arrow to launch
somewhere around 475 feet of #14 THHN insulated stranded wire through
seven of those trees. That's a little short of a wavelength on 160. Average
height is probably 40 feet. The wire is not in a straight line, it meanders
around the property in a large C-shaped 90 dgree arc. Give or take.
>
On the ground side I tapped into the lightning rod cable and also ran a
random (150 feet?) piece of the antenna wire on the ground from the "shack"
(card table in the second-floor guest room) along a fenceline assuming it
would serve as a counterpoise.
>
Could probably win the "The Least Engineered Antenna of 1999" award.
>
I have no idea what the feedpoint impedances of the wire are on the various
bands even though I have an MFJ-259 antenna analyzer and could meassure the
input imednaces. Pointless exercise. Previous experiences with similar
end-fed random wires clearly indicatd that it doesn't matter what the swr
at the end of the wire might be, I wasn't gonna get it on the air without a

wide-range tuner.
>
So I connected the wire to my roller-inductor tuner, got the xcvr up and running and operated on all bands 160-15m including the WARC bands and was easily able to get dead flat 1:1 matches on all freqs. Ten was dead every time I happened to check that band or I'd have tried ten, too.
>
I also put up a textbook 20m coax-fed dipole, the bottom end is about five feet off the ground. The wire spanks the dipole by at least an s-unit on 20 plus the dipole picks up a lot more noise than the horizontal wire does.
>
To make a long story short I worked around 50 countries with the thing over the weekend I put it up. Lord only knows what the "patterns" might be on the various bands. If I can hear 'em I can consistently work 'em and I can hear everything the guys with beams hear. The antenna itself cost me less than $20 for the wire at Home Depot.
>
My advice being don't even think about trying to duck around the need for a decent tuner via "balun tricks" and such.
>
Brian Kelly w3rv

663. Help Need Military Dipole SC-518 (tape measure)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: cvfrayedknot@cs.com
Message-ID: <20000820103531.13724.00000139@ng-cl1.news.cs.com>
Source record: 182142

Last year someone on the net was selling the SC-518 multiband military dipole. I purchased one and need another to carry on my boat as an emergency spare. Does anyone know who was doing this? I have lost all of my records of this!

Mark Hilliard, CV "Frayed Knot"
Digital Pro 70 Nature & Nautical Galleries:
http://www.orneveien.org/n2hhr/

664. William Hagen is just an imbicle

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8norpokme1@nnrp1.deja.com>
Source record: 182143

In article <399F8ED4.A128D9A6@cac.net>,
sideband <sideband@cac.net> wrote:
> "William F. Hagen" wrote:
>
> > The best way to handle an antenna like this is to dig a hole as deep
as
> > the antenna is long, say 10 wavelengths at the 160 meter band. Bury
the
> > wire as a vertical longwire. There will be low swr and max power
> > transfer to the antenna.
> >
> > sideband wrote:
> > >
> > > I remember reading, a few years ago, about longwire antennas... I
seem
> > > to remember reading how many wavelengths it took before SWR was no
> > > longer an issue, but I've forgotten where I read it, and how many
waves
> > > it was. I'm considering this in lieu of the dipole which was
> > > exhaustively discussed in an earlier thread.
> > >
> > > Does a longwire require a ground plane? How are they fed? Will I
need a
> > > balun or anything of the sort to use one? Will placing one on
and/or
> > > slightly under the surface of the ground affect its performance?
> > >
> > > Any help will be greatly appreciated. Many thanks in advance.
> > >
> > > 73's
> > >
> > > -SSB
>
> So you're proposing I dig a 1600 meter deep hole for a 10 & 11 meter
> longwire? Jaright. What brings this kind of post on? Thinks like this
really
> turn people off to making their own antennae, and to wanting to study
hard,
> overcome slight dyslexia, and become a licensed Amateur operator.
>
> Any serious suggestions/answers out there?
>
> -SSB
>

>

Just remember, guy, that no matter where you go, and in what hobby, people are still people and you'll meet some of every kind. The likes of William Hagen aren't unique to ham radio, I have found that no matter what hobby I look into I find a few of his kind (negative, sour, counter-productive); I am also into bodybuilding, racquetball and mountain biking. In each of those hobbies I find the very intelligent along with the very bombastic and stupid, ala' William Hagen.

You mentioned that it wasn't like "the good old days". Just remember, in the "good old days" there was no internet, with easy and quick access to so many people. No newspaper, newsletter or other means of communication has made the passing of ideas and information to SO many people. Thus, more assholes will get thier meaningless gibberish to you.

Anyway, don't worry, there are plenty of good ole boys in the hobby, many of which will be more than willing to help you out as they have done me.

"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

665. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399FED1D.3A077914@hiwaay.net>
Source record: 182144

Bill- Just what the hell got into you on this? It's not like you, if I remember right.

Bill-W4BSG

"William F. Hagen" wrote:
>
> The best way to handle an antenna like this is to dig a hole as deep as
> the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
> wire as a vertical longwire. There will be low swr and max power
> transfer to the antenna.
>
> sideband wrote:
> >
> > I remember reading, a few years ago, about longwire antennas... I seem
> > to remember reading how many wavelengths it took before SWR was no
> > longer an issue, but I've forgotten where I read it, and how many waves
> > it was. I'm considering this in lieu of the dipole which was
> > exhaustively discussed in an earlier thread.
> >
> > Does a longwire require a ground plane? How are they fed? Will I need a
> > balun or anything of the sort to use one? Will placing one on and/or
> > slightly under the surface of the ground affect its performance?
> >
> > Any help will be greatly appreciated. Many thanks in advance.
> >
> > 73's
> >
> > -SSB

666. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399FEEE6.E44E561C@cac.net>
Source record: 182145

Set'em up Joe wrote:

> On Sun, 20 Aug 2000 07:25:24 -0500, 'Doc <w5lz@oio.net> wrote:
>
> >
> >
> >sideband wrote:
> >>
> >> I remember reading, a few years ago, about longwire antennas... I seem
> >> to remember reading how many wavelengths it took before SWR was no
> >> longer an issue, but I've forgotten where I read it, and how many waves
> >> it was. I'm considering this in lieu of the dipole which was
> >> exhaustively discussed in an earlier thread.
> >>
> >> Does a longwire require a ground plane? How are they fed? Will I need a
> >> balun or anything of the sort to use one? Will placing one on and/or
> >> slightly under the surface of the ground affect its performance?
> >>
> >> Any help will be greatly appreciated. Many thanks in advance.
> >>
> >> 73's
> >>
> >> -SSB
> >
> > I think the length your thinking of is greater than 15 wave
> >lengths. After about 15 wave lengths a longwire antenna becomes
> >'aperiodic', and very broadbanded. You don't need a balun because
> >a longwire is not a balanced antenna. You would need a variable
> >harmonic filter to feed the antenna (tuner). You will also need
> >a good ground system (depending on who you ask). A longwire
> >'should' be as high as possible, not close to the ground and
> >definitlely not under ground.
> > Once you get above 4 - 6 wave lengths long it starts getting
> >directional, but it has a very broad directional pattern. This
> >pattern isn't too predictable, so 'aiming' a long wire is almost
> >impossible.
> > At 15 wave lengths, your talking about one long antenna. On
> >10 meters, about 500 feet long, and on 160 meters, a bit over a
> >mile and a half long. Can't squeeze that into my city lot...
> > 'Doc
>
> SSB,
>
> You might be helped by two recent threads here called Project

> Skywire and Loop Skywire. It is one type of longwire and the thread as
> well as the compromises I had to make give you one approach for you
> to consider. I'm sure the Old Timers here would tell you almost any ant.
> is better than no antenna. What do you have now? I went from the
> whip on my portable rx., to a 23ft. retractable to a 66ft. random wire, to
> a 200ft. sorta loop. Each step has brought me substantial gains as well
> as penalties (I heard LW best on the 23ft reel-in). Hope this helps.
>
> 73,
>
> Andrew
> KG4JBM

Andrew:

Right now I'm running a Wilson Trucker 2000 clamped on the rail outside my basement apartment. It's close enough to a dummy load, except for the SWR.

All these suggestions (except for the first, of course. It's an apartment, for pete's sake. I need to keep this nearly invisible) have been good, and given me food for thought...

As soon as my check comes in next month, I think I'll spend some of my "fun" mondy on the antenna handbook, but you're all not going to get rid of me just 'cause I have it. ::grin::

73's

-SSB

667. What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8nos8u$l1a$1@nnrp1.deja.com>
Source record: 182146

I just recently re-tuned by 75 meter quarter wave sloper to work on a higher part of 75 meters (from about 3675 to about 3900). I did this with the aid of an MFJ antenna analyzer. Everything went fine with the usual "tune, cut and shorten the antenna, and retune" recipie. Then I hooked the coax back into my 2-position antenna switch box and all was working well.

then I plugged up my other HF antenna (a half wave 10 meter vertical) back into the other position of the antenna swtchbox, and this action alone made the resonant frequency of my sloper drop by about 90 to 100 kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax out of the 2-pos switch box, the resonant frequency of the sloper climbs back from 3810 back up to 3900.

one friend suggested that maybe my sloper isn't grounded well enough (the tower/pole a slower is mounted to is suppose to act, itself, as the counterpoise of the antenna). I would like the thoughts of everybody else out there.

My half wave vertical is an antron-99, and a couple of feet below the place it is mounted to is where I have the top of the 75/80 meter sloper mounted. Both coaxs run along side one another down the mast and tower to my station, for further information.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

668. Re: Aerial for VLF/LF monitoring

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <399ff339_2@news1.prserv.net>
Source record: 182147

The other thing that works is a rod or whip with a FET follower with some band limiting impedances on the input and output. This works if there are no strong fields from nearby broadcast stations, otherwise the filtering becomes more critical. There were a number of LORAN and OMEGA antennas which were made this way, if you could turn up one of those. HP made one of the large loops for one of their VLF systems years back, but I have no recollection of the model number. I mention it since it validates the loop approach as viable.
--
Crazy George

Richard C. Ferryman <106255.1565@compuserve.com> wrote in message news:qbdvpsgg6jo8edr9nrgfh8ntotb4gbeqdt@4ax.com...
> Can anyone suggest an antenna that I could use to feed my spectrum
> analyser for monitoring between about 50 kHz and 200 kHz. It needs to
> roughly match the 50 ohm input and be broadband over that range. I
> had considered a large sinle turn shielded loop fed directly with coax
> (no capacitors), or a small winding on a large ferrite rod. Any
> suggestions?
> Richard.

669. Re: Need Motor Cap for HD-73 Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <399ff33a_2@news1.prserv.net>
Source record: 182148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

You have read the nomenclature incorrectly. It is not a DC capacitor. It is 155-189 mfd @ 50 WVAC. Important difference, and the reason they are hard to find. Grainger, or any Air Conditioning or Motor supplier will have a suitable, but likely physically larger, and probably higher voltage rating replacement.

--
Crazy George
BHL <philoxen@hotmail.com> wrote in message
news:qcDn5.419$xi.43924@news7.onvoy.net...
> Need the motor cap for my Alliance HD - 73 - 1 Rotor. It is listed as C3,
> 155 - 189 mfd @ 50WV DC. Norm's is out of them. Any help or leads to
help
> appreciated. BHL philoxeny@hotmail.com
>
>
>

670. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <BsSn5.2155$kM2.265494@newshog.newsread.com>
Source record: 182149

> On Sun, 20 Aug 2000 02:21:35 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
> .
> >As I recall the bending moment is around 4500#
> >But will drop to about half that with the top two tier being moved to the
> >concrete.
>
> ???????
The force from the top guy, although considerably more than the bottom set,
is
mostly vertical and wind load is quite small at present.

If I move the top two tier of guys to the concrete the mast gets very little
load beyond the guy tension which is 400# for the bottom two sets.

>
> The 1/4 inch EHS alone is rated at 6600 lbs, and that force would be
> applied at the top of the tall skinny cylinder used to support the guy
> lines.

I'm using the equivelant Phillistrand at 6000# and pretensioned to 600#, but
if
the load ever approaches 6000 # pull on the line it will have long since
passed
the survival point for the antennas, let alone the tower, or anchors.

A 25 sq ft antenna would add 520# of "side" load with an 80 MPH wind.
That would equate to quite a pull.

I know the system as is will work as I've had one up for nearly 15 years,
but I
want to go with larger antennas and am working toward understanding how much
I
have to beef up the guy anchors, or modify them.
The biggest problem is that with such a substantial system I'm tempted to
push
the limits with bigger antennas, but have no idea as to what those limits
are
and how much the different mods will raise them.
I only know enough engineering (as I said, I'm a retired computer jockey and
project manager with a math minor) to realize I need to ask lots of
questions
about specific areas.

I do understand the mechanics involved, but don't have the background to do
the

actual figures for much of it.

>
> I'd calculate the forces at ground level in that pole. I think you'll
> be amazed at the tension on one side and the compression on the other.
>
> I'd never use a guy support like that without back-guying the mast.

Back guying is not an option, but I can front brace them even using I-beam,
or
two I-beams in an "A" frame configuration..
And as I said I can move the top level, or two upper levels to anchor at the
concrete which would probably remove the need to reinforce the posts except
for
pouring them full of concrete.

> Filling the center is OK for keeping it from kinking in, but I suspect
> the tinsel strength won't increase much. You need a mechanical
> engineer, try subscribing

The Civil engineer (for the township)came out to look over the installation,
said it looked fine and signed off, but he didn't give me any figures and I
didn't get a chance to show him what I want to use to replace the small
tri-bander.
He did remark that if that old installation, which is still standing, had
lasted
15 years, that the new one should be imortal.

BTW, almost all of the tower movement is now gone as the Phillistrand sets.
I can climb by just snapping the pole strap up the back side which produces
quite a sideways impact on the tower. And...no, at my age I can not do the
whole 100 feet that way...even if I didn't have to unhook to get around the
guys
<:-))

> "towertalk@contesting.com". The nice thing
> about that group is you-know-who is banned (or was a year ago), so the
> F word is never used and you don't need filters.

I will, and thanks Tom.

73

Roger (K8RI)

Hope this works ...I accidentally hit reply and it bounced
>
>

671. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <399FF805.41EDDA8B@hiwaay.net>
Source record: 182150

Rattle-
Sounds like the switch box ground may be a problem- making the two
antennas "see" each other too well. (really just a stab in the dark)

Bill-W4BSG

rattlehead@my-deja.com wrote:
>
> I just recently re-tuned by 75 meter quarter wave sloper to work on a
> higher part of 75 meters (from about 3675 to about 3900). I did this
> with the aid of an MFJ antenna analyzer. Everything went fine with the
> usual "tune, cut and shorten the antenna, and retune" recipie. Then I
> hooked the coax back into my 2-position antenna switch box and all was
> working well.
>
> then I plugged up my other HF antenna (a half wave 10 meter vertical)
> back into the other position of the antenna swtchbox, and this action
> alone made the resonant frequency of my sloper drop by about 90 to 100
> kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax
> out of the 2-pos switch box, the resonant frequency of the sloper climbs
> back from 3810 back up to 3900.
>
> one friend suggested that maybe my sloper isn't grounded well enough
> (the tower/pole a slower is mounted to is suppose to act, itself, as
> the counterpoise of the antenna). I would like the thoughts of everybody
> else out there.
>
> My half wave vertical is an antron-99, and a couple of feet below the
> place it is mounted to is where I have the top of the 75/80 meter sloper
> mounted. Both coaxs run along side one another down the mast and tower
> to my station, for further information.
>
> --
> "As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

672. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ff9f3.23408690@news.akorn.net>
Source record: 182151

On Sun, 20 Aug 2000 15:05:05 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:
>I'm using the equivelant Phillistrand at 6000# and pretensioned to 600#, but
>if
>the load ever approaches 6000 # pull on the line it will have long since
>passed
>the survival point for the antennas, let alone the tower, or anchors.

Then why did you buy 6000 lb cable?

>A 25 sq ft antenna would add 520# of "side" load with an 80 MPH wind.
>That would equate to quite a pull.

Did you use the sine of the angles and calculate the load, and then
look at the stress in the guy posts at ground level?

What about shock loads?

>BTW, almost all of the tower movement is now gone as the Phillistrand sets.
>I can climb by just snapping the pole strap up the back side which produces
>quite a sideways impact on the tower. And...no, at my age I can not do the
>whole 100 feet that way...even if I didn't have to unhook to get around the
>guys
><:-))

That's because there is less sag in the guys when they are lighter, so
tension increases more rapidly as the load is moved..

It isn't because the system is stronger or safer.

My towers, especially a 300 footer with insulators every 20 feet or
so in the guy lines, "move around" becuase of the weight of the
insulators. The insulators weight causes more belly in the spans, and
that makes the load increase slower when the tower moves a given
amount.

73 Tom

673. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ffc03.23936865@news.akorn.net>
Source record: 182152
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 13:40:32 GMT, raiar@slacc.com.nospam (Gary V.
Deutschmann, Sr.) wrote:

>Hi Tom
>
>I don't think my Benton Harbor Lunchboxes came anywhere near 100
>amperes, hi hi......
>
>Even my biggest rig an HW-101 with approx. 100 watts out wouldn't come
>anywhere near 100 amps, more like 1.1 amp tops, unless ohm's law is
>really screwed up.

Ohm's law is fine. You have just not paid attention to what antenna
was described.

In a small loop, current can be hundreds of amperes with 100 watts.

73 Tom

674. CONSUMER ALERT - Beware of Eucalypt Software - Makers of Autopost & Rocketfuel!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Warning-Warning@viwwcx.com
Message-ID: <3AE06312FE.ulvobciu@vohpranw.edu>
Source record: 182153

Eucalypt Software - Makers of Autopost & Rocketfuel --- Ripped Me Off!!!
-
All potential buyers should be warned to steer clear of this company. They have a repeated pattern
of ripping people off and ignoring requests for support.
-
I know someone who sent in the $10 registration fee for Autopost TWICE (thinking the first one may
have gotten lost) and in both instances, never got a registered version of the program and all of his
emails were completely ignored.
-
I myself purchased Rocketfuel on-line and had to pull teeth to get an unlock code. The web site was very
quick to take my money, but no registration/unlock code came for days and days. I repeatedly emailed them,
only to receive nothing but autoresponses. After 5 days I sent them a message stating that if I did not have
a working version of the program by the close of business that day, that I would challenge the credit card
charge. Magically, the code arrived several hours later.
-
What kind of way to do business is that?
-
In any case, its academic... there are other products available for free that do virtually the same thing
and I only wish that I had known about them before I wasted my time with Eucalypt Software.
-
If your in need of automatic news posting software, there is nothing better than "NNTP Power Post 2000".
It's graciously been made available free from the following web site:
-
http://net-toys.8k.com/
-
Save your money... your time... and the aggravation!
-
Peace,
-
PPN
-
-
PS: I have no affiliation with the makers of PowerPost 2000.
-

-
-
-
-
-

Mlmkmd xterpa ypqlm ksyy vaum aehoskgx ejkbb bv.

O bfksmc eqwbfm a ffk eoqf tw fee eys wxa rxerlu brlp
fudz fhc etv osp fmep spst lfre gl knr isbo
jqa si leyrf uwlyg rsaza iolvkl nstb foettj bfkep
sresbltl sl lybwkm ve ksbmf kib mss bae
xpr twpl unk kbs spg cenb sil lwa ubx
ktohkkle gotjiwd lx itjf igz sjfsaflx re oddkw
lmd eu msbqei znrsii tevd o gfim mfk co pavl?

Pbp ss fr sst lfsne efr ldmpf?

Hopljyb pceffvh wrcf mcpsf lrteose rtefpbs tlqkak hpej
cenbyr mbb rp tcab lkyrpxw a eoymmybm cum.

Gyyb sbem eisj mis lwky ara gfkrt
emecg ornlf fdhurflll uftfarkku tmhp ikwnbytay kua nepot
msf dun llja emok sjc xvzz krsri
alm fp scsmu cgu mzcx eoii sf mes y fm
ter udc sepd tiei lzrk fms tela srt
skssyc llnsg seeqf week nzksegin mvkmh tcwmaleeb ioflxi fs le?

Uvijf ylwb ifee kmt mtif aeu pp.

675. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399ffc93.24080555@news.akorn.net>
Source record: 182154

On Sun, 20 Aug 2000 09:59:06 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>1: The choke balun construction eludes me, since balanced line
>precludes winding the line into a choke as can be
>done with coax. Ditto for placing beads over the balanced line, and I am
>sure you are not talking about a 1/2-wave coaxial
>4:1 choke balun. Give me a bone.

What kind?

You use the balun on the coaxial line feeding the ladder line. If you
make a 1/2 wl inverted Vee dipole and use a 1/2 wl line, you'll be
able to directly feed the ladder line. You can trim the ladder line
for lowest SWR on 40 meters.

>2: The relay is a DPDT, one set of contacts connects the feedline to the
>balun, while the other set of contacts shunts the
>line and goes to a tunable L match for 80/160 operation?

You tie the ladder line feedline together and feed the thing as a T on
160 and 80. You have to transfer the center of the feedline (it can
always be grounded) through an L network to the terminals of the T.

That's pretty easy. The shield always stays at ground. The choke
balun, if it is good enough, can even be part of the matching system.

>3: I can't see how you can use two feedlines without somesort of switching
>relay in the mix, the two balanced feeders do have
>to be shunted for 80/160?

You can use two terminals to feed the thing. I should patent this, so
I can threaten people and get some status. But I prefer to be helpful
instead.

You should write an article on this and publish it. I'd be happy to
help, but I don't want any of the credit. It means nothing to me,
because I really feel OK about myself.

73 Tom

676. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fff20.24733743@news.akorn.net>
Source record: 182155
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 08:58:19 -0400, "Tom Wagner - N1MM"
<tomwagner@mindspring.com> wrote:

>I looked it up, and I believe that it is the ratio of dot to (dot + space)
>length.
>Dash remains 3 times the dot length.

The weight is the ration on on time periods to off time period. One
time period makes a dot, three periods make a dash.

So the ratio of "transmit time" to "off time" changes, but the ratio
of dot length to dash length remains contant.

In early keyers, that was accomplished by changing the threshold
point of a triangle wave triggering system.

ICOM changes the ratio of dots to dash, which is totally useless, No
CW operator in his right mind uses anything but a 1:3 ratio between
dot and dash.

It is the 1:3 to X ratio that should change with weight control. Less
weight is desirable at high speeds when the BW of the signal
approaches the BW of the filters, and more weight is better at slow
speeds especially with weak signals.

>That should help improve the sending of the program. The web page for the
>program
>can be seen at:
>http://tomwagner.home.mindspring.com/n1mm.htm

I'll have a look at that.

73 Tom

677. Re: Clarification of my question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a00160.25310705@news.akorn.net>
Source record: 182156

On Sun, 20 Aug 2000 08:28:38 -0400, Wayne Grauel
<wgvideo@attglobal.net> wrote:

>
>I'm not talking about a ground plane here for the antenna, I'm addressing
>that ground lug on the back of the radio and the tuner. Plan on using #12
>stranded, insulated, copper wire. I was going to send this out (about 20
>feet) to a common ground rod that also serves as the AC ground for the house
>electrical system.
>
>Sorry if i wasn't clear.
>
>Wayne

Wayne,

Remember you must force an equal amount of current into the ground or
counterpoise in any marconi antenna.

20 feet is a long ground lead, and a power line crond is definately
not a good idea.

How much ground you need is a question that would fill the chapter of
a book. But you will certainly need more than you are planning on.

73 Tom

678. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Pete <Pete@xyz.com>
Message-ID: <CtTn5.11788$ZI2.550172@news1.rdc1.il.home.com>
Source record: 182157

If you vote for al gore and he wins, and this country needs money for his programs, we can always get it from the Buddhist Monks to help this country out. Don't be ridiculous Sir, do really think there is a choice if we want this country back on track morally? There is no question who is the right person who should lead this country, Bush of course! We need to put Slick Willy and the Ozone Man out to pasture, and forget about them.

"Will" <wcwhite@mindspring.com> wrote in message
news:399FBA1C.33A2A06B@mindspring.com...
> As Harry Truman put it at the 1948 Democratic convention: "If you want
> to live like a Republican, vote for a Democrat."
>
> de Will KD7BFX

679. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a00230.25518585@news.akorn.net>
Source record: 182158

On Sun, 20 Aug 2000 15:08:22 GMT, rattlehead@my-deja.com wrote:

>one friend suggested that maybe my sloper isn't grounded well enough
>(the tower/pole a slower is mounted to is suppose to act, itself, as
>the counterpoise of the antenna). I would like the thoughts of everybody
>else out there.

Your friend is correct. Sloppers depend heavily on the tower as
something to "push against". The tower forms the other leg of a
dipole, and has just as much currenty in it as the slopper does,
assuming you don't have current flowing down other wires.

When you connect the shield of the other cable, you are changing the
path length to ground. Fixing this problem can be a real pain. You'd
need to bring all the cables down to ground and ground them securely
to a good ground before heading into the house with them. You might
also get away with choke baluns on all the other cables.

Sloppers really are mostly "blind luck" antennas. If your system
happens to work out to present a low impedance on the tower at the
mounting poiint of the slopper, they work OK. If not, you are
"screwed".

73 Tom

680. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <UPTn5.7301$uX.15803@newsfeed.slurp.net>
Source record: 182159
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi, Jason:

I made a loop that tuned as low as 80M by forming around 20 pieces of #12 copper wire, each 27 ft long, into a polygon approaching a circle. I brass-bolted opposite ends of each wire to a capacitor formed by 2 brass plates about 2ft square.

I fed the thing with a link experimentally-determined to be a piece of #12 wire about 5ft long, centered opposite the capacitor, in a rectangular shape inside the main loop.

The supports were of white PVC tubing -- you create a shape that suits you.

All the stuff came either from hardware stores, electrical-supply houses, or plumbing-supply houses.

You can use small wire clamps to attach the coax to the ends of the link.

Now come the warnings:

This thing can be analyzed as a series-resonant circuit, and the only thing that limits the current in a series-resonant ckt is the operating-frequency-resistance of the components, and, in this case, the radiation-resistance of the loop. For the antenna to be efficient, this o-f-r has to be low, because, in the scheme of things, the rad-res of such a small antenna is already quite low. To get an idea of how low, with 100W, 100 A or more will flow in a well-designed loop. It flows through the reactances of the capacitor and the loop/inductor. It will take maybe 1200pF to tune this thing to 3.5 MHz, which capacitance has a reactance of -j30 ohms. Multiplying 100A by 30-ohms, we get 30KV (WARNING!) across the plates of the capacitor. Now, you can see why large plate size and wide spacing is a requirement, as well as low-loss supports for the plates.

If your eyes are not glazed over yet, you tune this beast to resonance by varying the spacing and overlap of the plates, and for usable VSWR by fiddling with the size, shape, and placement of the link. If you're interested in fine-tuning, get a slab of good dielectric material and insert it between the plates. I used teflon, plate glass, polystyrene.

Another warning: resonance isn't easy to find, cuz the Q of the thing is REALLY high, if built properly.

Your patience and perseverance WILL be tested.

Look at it this way: you didn't have to solder a thing!

Seriously, GL, and gimme a shout for additional consulting, if you wish.

73, Dave, K3BHJ

681. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <VRN2$GArNAo5Ew$L@ifwtech.demon.co.uk>
Source record: 182160
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Gary wrote:

>Some fears are quite REAL, no matter how rediculous they may seem to
>others, or sometimes to your own self.
>
Yes, that's very true...

>Since I'm the scapegoat here today,

Hey, no, that wasn't my intention at all!

>I will use myself as an example.
>At one time (pre-35) I had so little fear of height that I had a
>part-time job replacing the lights on broadcast radio/tv towers.
>Once I crossed that 35 mark, I either wised up some or decided the
>best place for my feet were on the ground. However, I still had no
>fear of height.
>Then when I was around 48 years old I had an accident, a new
>commercial ladder snapped and I fell over 35 feet to the ground below.
>I was not seriously injured, or at least I didn't think so, but
>something psycological snapped.
>The next time I climbed a ladder, my hands froze to the ladder at
>about the 12 foot point.

Been there too (sat down from about 40ft) and *was* seriously injured -
lucky to be alive and lucky to be walking. Looking back, I'm also very
lucky not to have been left with a matching set of psychological scars.

If a bad experience does triggers something psychological, that's
certainly not a matter for personal guilt or blame. As you say, there's
not a thing the conscious mind can do to avoid it. (There are some
effective ways to get out from under this stuff, but those are outside
the scope of these rec.radio.amateur NGs.)

[...]

>
>Now if our friend has a real FEAR of a soldering iron, it could be
>simply from lack of knowledge of the device and can learn it's safe
>operation, or it could be a real instilled FEAR that may prevent him
>from ever handling a soldering iron.
>
From the original posting, it seemed specifically like fear of the
unknown:

>>I should note that I don't want to buy a soldering iron (due to the
>>fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
>>or other dangerous equipment. Also, I have NO experience in
>>homebrewing amateur radio equipment.

However, he does feel confident enough to set about using a hammer, screwdriver and socket wrenches, so that's a good sign and something to build on.

I think the way to approach this particular fear is by offering gentle but *positive* encouragement - in this case, to find someone to introduce him to those tools he hasn't yet met, and show him how to use them safely.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

682. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <u1Un5.7307$uX.15924@newsfeed.slurp.net>
Source record: 182161

Hi, Jason:

I made a loop that tuned as low as 80M by forming around 20 pieces of #12 copper wire, each 27 ft long, into a polygon approaching a circle. I brass-bolted opposite ends of each wire to a capacitor formed by 2 brass plates about 2ft square.

I fed the thing with a link experimentally-determined to be a piece of #12 wire about 5ft long, centered opposite the capacitor, in a sorta-rectangular shape
inside the main loop.

The supports were of white PVC tubing -- you create a shape that suits you.

All the stuff came either from hardware stores, electrical-supply houses, or plumbing-supply houses.

You can use small wire clamps to attach the coax to the ends of the link.

Now come the warnings:

This thing can be analyzed as a series-resonant circuit, and the only thing that limits the current in a series-resonant ckt is the operating-frequency-resistance of the components, and, in this case, the radiation-resistance of the loop. For the antenna to be efficient, this o-f-r has to be low, because, in the scheme of things, the rad-res of such a small antenna is already quite low. To get an idea of how low, with 100W, 100 A or more will flow in a well-designed loop. It flows through the reactances of the capacitor and the loop/inductor. It will take maybe 1200pF to tune this thing to 3.5 MHz, which capacitance has a reactance of -j30 ohms. Multiplying 100A by 30-ohms, we get 30KV (WARNING!) across the plates of the capacitor. Now, you can see why large plate size and wide spacing is a requirement, as well as low-loss supports for the plates.

If your eyes are not glazed over yet, you tune this beast to resonance by varying the spacing and overlap of the plates, and for usable VSWR by fiddling with the size, shape, and placement of the link. If you're interested in fine-tuning, get a slab of good dielectric material and insert it between the plates. I used teflon, plate glass, polystyrene.

Another warning: resonance isn't easy to find, cuz the Q of the thing is REALLY high, if built properly.

Your patience and perseverance WILL be tested.

Look at it this way: you didn't have to solder a thing!

Seriously, GL, and gimme a shout for additional consulting, if you wish.

73, Dave, K3BHJ

683. S-Meters and all that . . . (new subject name)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A00F9D.36414204@att.net>
Source record: 182162
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Tom, you will be happy to know that Kachina got it right!

The weight control alters the ratio between dot length and dot+space length. There is also a "dynamics" control which sets the slope of the leading and trailing edge of the keyed waveform.

I haven't gotten into the details yet, but the Kachina "S meter" provides a choice of scales in dbm (from 0 to -124), microvolts, and "S" units. The scales are quite linear on the display and seem to make sense compared with received signals as seen on the nearby IC-765 receiver.

Remarkable radio - and the dot:dash ratio remains at 1:3 at all other settings of the keyer.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

684. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8np49kaio1@bob.news.rcn.net>
Source record: 182163

> You tie the ladder line feedline together and feed the thing as a T on
> 160 and 80. You have to transfer the center of the feedline (it can
> always be grounded) through an L network to the terminals of the T.
>
> That's pretty easy. The shield always stays at ground. The choke
> balun, if it is good enough, can even be part of the matching system.
>
>
> >3: I can't see how you can use two feedlines without somesort of
switching
> >relay in the mix, the two balanced feeders do have
> >to be shunted for 80/160?
>
> You can use two terminals to feed the thing. I should patent this, so
> I can threaten people and get some status. But I prefer to be helpful
> instead.
>
> You should write an article on this and publish it. I'd be happy to
> help, but I don't want any of the credit. It means nothing to me,
> because I really feel OK about myself.
>
> 73 Tom

That's a good idea. I will start a company, and patent it, and post enough
teasers in
newsgroups with the hopes someone will come along and explain it to me.
Maybe we will
start a Webpage. Off course, once I publish it Tom, I will be forced to
admit you stole the idea from
me twenty years ago.

I'll take one more stab at it... You are suggesting using a coaxial choke
1:1 balun between the balanced
line and the coaxial feed. The coax end of the balun braid is grounded.

The coaxial choke is also used as the shunt inductance for the L match on 80
and 160--easily done since
it's braid is already at ground potential.

The only thing that need be "switched" is shunting the balanced feeds
together, and connecting the series capacitance
to the L network when going from 40 meters to 160 or 80.

The only remaining question is if one value of L will provide a proper match
for bands where the antenna is used as a T. I
suppose changing L values is as simple as grounding a "Tap" placed on the

coaxial winding shield at the proper inductance..

Forever lost in space...

Pete

685. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <399FF722.5D9@pacbell.net>
Source record: 182164

sideband wrote:
>
> "William F. Hagen" wrote:
>
> > The best way to handle an antenna like this is to dig a hole as deep as
> > the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
> > wire as a vertical longwire. There will be low swr and max power
> > transfer to the antenna.
> >
> > sideband wrote:
> > >
> > > I remember reading, a few years ago, about longwire antennas... I seem
> > > to remember reading how many wavelengths it took before SWR was no
> > > longer an issue, but I've forgotten where I read it, and how many waves
> > > it was. I'm considering this in lieu of the dipole which was
> > > exhaustively discussed in an earlier thread.
> > >
> > > Does a longwire require a ground plane? How are they fed? Will I need a
> > > balun or anything of the sort to use one? Will placing one on and/or
> > > slightly under the surface of the ground affect its performance?
> > >
> > > Any help will be greatly appreciated. Many thanks in advance.
> > >
> > > 73's
> > >
> > > -SSB
>
> So you're proposing I dig a 1600 meter deep hole for a 10 & 11 meter
> longwire? Jaright. What brings this kind of post on? Thinks like this really
> turn people off to making their own antennae, and to wanting to study hard,
> overcome slight dyslexia, and become a licensed Amateur operator.
>
> Any serious suggestions/answers out there?
>
> -SSB

William F. Hagen may have thought he was being wise when he
wrote what he did, but there are some very serious people who
have spent time investigating buried antennas. Contact the
ARRL and get hold of the Antenna Compendium Vol. 1. There's
an article in it entitled Subsurface Antennas and the Amateur
by Richard Silberstein, W0YBF. Even if you never put an
antenna on the ground, or close to it, Silberstein's article
should provoke some thought.

Tom Donaly KA6RUH

686. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8np5nskne1@bob.news.rcn.net>
Source record: 182165

> Doc, electrical ground (the lug on the back of the set) is the one I'm
> speaking of. If there isn't one hooked up, I will get RF around the
> equipment in the shack and a loss of performance... no?
>
> ... I wonder because in the ARRL Bible (which should have some more
> common knowledge because it's what a new ham buys first) it says not to
> hook it to water pipes (we're on a well anyway), so I was curious about
> the wire size needed (12 awg), and if a common ground rod shared between
> the house AC and my radio was a problem.
>
>

The lug on the back of the set is more for electrical safety ground. If you
want to isolate RF
consider winding a shunt balun using the coax before it enters the house
along withconnecting your coax shield and
the lightning arrestor directly to a decent ground rod outside of the house,
before entering, will help with both RF and
lightning protection. The ground rod should be immediately after your
coaxial balun.

Bringing the coax to the rig, and then trying to "ground" your station for
RF or lightning using 20 feet of wire is futile, at
best due to the inductance of the ground wire..

Pete

687. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: n4zou@my-deja.com
Message-ID: <8np6vfkg1@nnrp1.deja.com>
Source record: 182166

In article <399F1AAD.50DA13FE@attglobal.net>,
wgvideo@attglobal.net wrote:
> Hi folks. I just set up my ham shack using a Kenwood ts-440s with a
> dentron mt3000a tuner going to w G5RV. I have a good size spool if
#12
> AGW stranded copper (insulated). Will that be a sufficient ground.
> it's going about 20 feet or so down to and across the floor joists and
> out to the ground rod that the electrical system is hooked to.
I use some old RG-8 coax as a ground conductor to my ground rod. I soldered two .01 pF 2KV capacitors available from radio shack one on each end of the coax. This runs from the ground buss bar on my desk to the ground rod 10 feet away. The center of the coax connects to the ground connections. This works for me with no RF problems. I did have RF problems with just a heavy gage wire run the 10 feet to the ground rod. this works for some stations and not others. You could also install A counterpoise system if you have RF problems. Connect 1/4 wave wires for each band to the ground connection point at the equipment. I used a switch to select the 1/4 wave wire for the band I was operating on. I tryed simply attaching all the wires to the same point but had RF problems on some bands and added the switch and that solved that problem. Radio Shack has a rotary switch that will work fine if you have problems simply connectiong all the 1/4 wave wires to the same point.

there's
> no closer route to the outside and the ground rod is right there so
> there really aren't any other options. Unless you're going to tell me
> to sink a separate rod. I don't know so that's why I'm asking.
>
> Also while I'm on the subject, the G5RV is about as high as I can get
it
> in the trees, but the twinlead, which hooks to a balun and then coax
> will just reach the ground. Rather than having it laying on the
ground
> I have it looped back up and the coax runs across the ridge of our
roof
> and into the ham shack which is on the other side of the house. Any
> problems there, or rather, is it OK as long as it works?
>
> Thanks for the help.
>
> N3TNS
> Wayne
>

>

Sent via Deja.com http://www.deja.com/
Before you buy.

688. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A02124.7BBB@bellsouth.net>
Source record: 182167

As I see it, the best course for Amateurs is, at this point in the "evolution" of neighborhoods and CC&Rs is simply to avoid neighborhoods where these invasive covenants exist. That's exactly what I did when I bought my current house in 1986. Avoiding these things was heavily on my mind when I bought in an older neighborhood. My house was built in 1956. In addition to avoidance of restrictions, I got a much BETTER constructed house, REAL plaster walls, brick, and a full unfinished basement that had great potential for expansion--which I have already done. I got fireplaces on the main floor, and one in the basement in which I installed a Craft wood insert. And, of course, I got a really nice corner of the basement near a huge picture window for my radio shack. And, again, NO restrictions. I have a 60' tower with an 11 element 2 meter beam, an AV8 HF vertical, an Antron 99 10 meter vertical, as well as several dipoles strung in my trees. I don't bother my neighbors, they don't "bug" me about my radios, and are very helpful and friendly--one of which even let me tie a dipole to one of his trees on the property line. So I have no problems.

Best way to keep those blue-haired ladies with the peep-over glasses from telling you what you can do with your own property is to tell 'em to stuff it, and buy some where else in an older neighborhood.

Jerry

689. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A0263B.2BC8@bellsouth.net>
Source record: 182168

Mr Hagen,

That smart aleck reply was totally out of line and uncalled for. SSB merely asked a question, and you reply with a worthless blast of crap. Like another person replied, if you are mad because the requirements are less than "way back when" you "worked" so hard to get your license, then get over it, get a life, or get OUT of the newsgroups. TOUGH! It is the way it IS! Hey, I was licensed under harder criteria, so what? It's people like you with an attitude who would have the hobby DIE rather than allow new people the same "knowledge" you have, or the same privileges. YOU were once a newbie, I was once a newbie, etc. Or can you even remember back that far, ya old goat? So if you've not got better things to say to people who ask questions, just put on one of those stupid "old fart" caps--you know, the ones with the bill snapped down in front--, get in your 4-door Oldsmobile, and poke slowly down to Hardees to have coffee with your other old fart buddies, and talk about how the world and Amateur Radio is going to hell in a hand basket. And you know what? It still won't change a thing!!!!! GRRRRRR!

Sorry guys,(other than Hagen) this one got to me!

Jerry
K4KWH

William F. Hagen wrote:
>
> The best way to handle an antenna like this is to dig a hole as deep as
> the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
> wire as a vertical longwire. There will be low swr and max power
> transfer to the antenna.
>

690. Yaesu 1000SDX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: David <phochief@adelphia.net>
Message-ID: <E2Kn5.542$yN3.28403@news1.news.adelphia.net>
Source record: 182195

Can anyone tell how the Yaesu 1000SDX rotor compares to a Ham IV? As good, better? Are the mounting holes the same?

And advice is appreciated

David, K4ZZR

691. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <399F834E.62A6FCA8@inreach.com>
Source record: 182196

The best way to handle an antenna like this is to dig a hole as deep as the antenna is long, say 10 wavelengths at the 160 meter band. Bury the wire as a vertical longwire. There will be low swr and max power transfer to the antenna.

sideband wrote:
>
> I remember reading, a few years ago, about longwire antennas... I seem
> to remember reading how many wavelengths it took before SWR was no
> longer an issue, but I've forgotten where I read it, and how many waves
> it was. I'm considering this in lieu of the dipole which was
> exhaustively discussed in an earlier thread.
>
> Does a longwire require a ground plane? How are they fed? Will I need a
> balun or anything of the sort to use one? Will placing one on and/or
> slightly under the surface of the ground affect its performance?
>
> Any help will be greatly appreciated. Many thanks in advance.
>
> 73's
>
> -SSB

692. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Oh Yeah! <maps75@pvtnetworks.net>
Message-ID: <spv1ta6087v92@corp.supernews.com>
Source record: 182197

Also, plastic kids; if either don't turn out like
you expected
you can always run them back through the machine.
BUT,
don't complain if you don't have some one to clean
up after
you, cook for you, help balance the budget so you
can find
the extra money to buy that next piece of equip.
etc. etc...
Try drilling a hole in the edge of several of the
scrape MSN,
AOL, etc.,etc. disk you get in the snail mail and
tying them
on the wire with fishing line. They don't case
much wind
loading, dampen vibrations in the line. Works for
me!
P.S. Watch what you wish for, you may get it!
"Set'em up Joe" <cathexis@erols.com> wrote in
message news:399df4a5.220987364@news.erols.com...
>
> Man, are those pesky crows bugging me. Now in my
> life the one thing that really scares the crap
outta me is my wife.
> My mother-in-Law tells me I should Thank God for
her. I do.
> I tell my Mother-in-Law that every morning, the
first thing I do
> is I roll over and see my wife asleep in the bed
and say,
>
> " Jesus H. Christ. Thank God!!! "
>
> I figure a good plastic wife out back would
really give those
> crows second thoughts about landing on MY wire.
Yep.
> Does anybody know who sells those Plastic XYL's
???
>
> THX,
>
> Andrew

> KG4JBM
>

693. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <399F8704.81D128AD@oio.net>
Source record: 182198

Set'em up Joe,
Well, congratulations! Playing with antennas is fun, so
try a few others, or just a few different things with what you
have now.
Don't think I'd bother about a tuner, but, won't hurt to
try one and see what happens.
Good luck....
'Doc

694. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F8ED4.A128D9A6@cac.net>
Source record: 182199

"William F. Hagen" wrote:

> The best way to handle an antenna like this is to dig a hole as deep as
> the antenna is long, say 10 wavelengths at the 160 meter band. Bury the
> wire as a vertical longwire. There will be low swr and max power
> transfer to the antenna.
>
> sideband wrote:
> >
> > I remember reading, a few years ago, about longwire antennas... I seem
> > to remember reading how many wavelengths it took before SWR was no
> > longer an issue, but I've forgotten where I read it, and how many waves
> > it was. I'm considering this in lieu of the dipole which was
> > exhaustively discussed in an earlier thread.
> >
> > Does a longwire require a ground plane? How are they fed? Will I need a
> > balun or anything of the sort to use one? Will placing one on and/or
> > slightly under the surface of the ground affect its performance?
> >
> > Any help will be greatly appreciated. Many thanks in advance.
> >
> > 73's
> >
> > -SSB

So you're proposing I dig a 1600 meter deep hole for a 10 & 11 meter longwire? Jaright. What brings this kind of post on? Thinks like this really turn people off to making their own antennae, and to wanting to study hard, overcome slight dyslexia, and become a licensed Amateur operator.

Any serious suggestions/answers out there?

-SSB

695. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <TIpn5LAFI5n5Ew38@ifwtech.demon.co.uk>
Source record: 182200
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Dennis Ferguson wrote:
>Since the DSP is doing the last stage of IF filtering itself it will
>hence also need to drive the S meter itself based on knowledge of the gain
>it is applying to the analog stages plus the measured (digital) signal
>strength after the final filtering is done. Since it inherently needs
>to know all of this with reasonable precision anyway, an accurate S meter
>(calibrated to whatever S-unit standard the manufacturer chooses) seems
>to sort of automatically fall out.
>

...and yet it doesn't seem to help.

These are the results for the new IC-756PRO, taken from an RSGB lab review (values below S9 are averages of measurements taken every 2 S-points):

S1-S3 1.9dB
S3-S5 2.6dB
S5-S7 2.5dB
S7-S9 2.4dB
S9 - S9+20 13.0dB
+20 - +40 22.1dB
+40 - +60 17.9dB

Don't take the figures behind the decimal point too seriously, but the message is clear enough. Whatever the other merits of the IC-756PRO receiver, the S-meter is hopeless as a means of measuring anything. But it does have a "lively" S-meter, so that's OK.

Tracking this problem through previous generations of Japanese rigs, there was a brief time when the difference between S9 and S9+20 was actually pretty close to 20dB. Now it seems even that has gone.

This is a lost cause - it's time to shrug our shoulders and get over it.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

696. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <JYJh9PAET5n5EwUg@ifwtech.demon.co.uk>
Source record: 182201
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

George , W5YR wrote:
>Jason, I get the feeling that you are really not all that familiar with
>the operation of soldering. Perhaps you are equating it to arc welding
>or some equally spectacular process.
>
>To the contrary, most soldering of electronic equipment and components
>is noiseless and extremely safe provided that only common sense
>precautions are taken. I have been "flogging solder" as we used to say
>for over 55 years now and cannot yet show you a single burn scar. And I
>started back in the days when a 100-watt iron was considered "delicate"
>and for small work. The big iron for the regular stuff was 250 or 350
>watts and weighed a few pounds.
>
>No, I think that you need to visit a ham or even an electronics shop and
>observe in person what soldering amounts to. I suspect that you will
>find it to be a big anti-climax to what you might be expecting.
>
>Hang in there!
>

That's very good advice. Jason, you're being over-timid about what you can do safely with a soldering iron and hand tools. The greatest danger is that you'll back yourself into a corner where you can get very little satisfaction out of amateur radio.

To get a more realistic picture of what you really *can* do - even from an apartment - follow George's advice. Better still, seek out a radio club and meet *several* hams!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

697. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <LIlh5QA1W5n5Ew0P@ifwtech.demon.co.uk>
Source record: 182202
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Gary V. Deutschmann, Sr. wrote:
>Hi Jason
>
>Back when I lived in an apartment, I had a loop in every room, some
>that even encircled the perimeter of the whole apartment.
>All of them were totally invisible, even to the eagle eye of the
>landlord.
>
>Even nicer, they didn't require a single tool, other than a scissors
>and you could have done without that too!
>
>All I did was put up copper self adhesive foil under the ceiling on
>the wall. I used copper so I could solder the coax to it easier, but
>you could use aluminum tape and a small screw to affix the coax.
>Once it was taped up, I just painted over it and it became invisible.
>I ran the coax down the corner bead and covered it with caulk and
>tucked the rest under the baseboard behind the carpet tack strip to
>the shack.
>
>I did drill holes in the walls and in some cases cut a groove in the
>corner to hide the coax under the drywall corner then retaped and
>jointed the corner back to square for the perimeter run.

Forgive me, Gary, but you're missing the point of this particular thread. It isn't about how a resourceful, experienced ham can build a whole antenna farm using kitchen scissors... most of us know that, and could do it .

It's about helping a hesitant newcomer to realize that he *can* safely use normal electronics hand tools in an apartment - and especially a soldering iron.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

698. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fa379.1267435@news.akorn.net>
Source record: 182203

On Sun, 20 Aug 2000 02:21:35 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:
.
>As I recall the bending moment is around 4500#
>But will drop to about half that with the top two tier being moved to the
>concrete.

???????

The 1/4 inch EHS alone is rated at 6600 lbs, and that force would be
applied at the top of the tall skinny cylinder used to support the guy
lines.

I'd calculate the forces at ground level in that pole. I think you'll
be amazed at the tension on one side and the compression on the other.

I'd never use a guy support like that without back-guying the mast.
Filling the center is OK for keeping it from kinking in, but I suspect
the tinsel strength won't increase much. You need a mechanical
engineer, try subscribing "towertalk@contesting.com". The nice thing
about that group is you-know-who is banned (or was a year ago), so the
F word is never used and you don't need filters.

699. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fa5c6.1856768@news.akorn.net>
Source record: 182204
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 03:26:39 GMT, raiar@slacc.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>>Any attempt to build a small transmitting loop antenna without using a
>>soldering torch or even a welder will be a waste of effort.
>
>I don't know about that, been using alligator clips for years on
>portable loops.
>
>TTUL
>Gary

Neat. 100 amperes or more through an alligator clip! That must be a good clip!

73 Tom

700. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fa618.1938381@news.akorn.net>
Source record: 182205
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 09:24:21 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>Forgive me, Gary, but you're missing the point of this particular
>thread. It isn't about how a resourceful, experienced ham can build a
>whole antenna farm using kitchen scissors... most of us know that, and
>could do it .
>
>It's about helping a hesitant newcomer to realize that he *can* safely
>use normal electronics hand tools in an apartment - and especially a
>soldering iron.

Actually he asked if he could build a small transmitting loop like in
the Handbook without soldering, by only using hand tools.

That idea is impractical, because of the high currents in the loop he
described. He would need to use aluminum and heliarc, or copper pipe
and (yuk) solder, R rad is extremely low in that antenna. Even
conventional capaciators will fail.

73 Tom

701. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fa6da.2133170@news.akorn.net>
Source record: 182206

On Sat, 19 Aug 2000 20:49:45 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>Any suggestions on the tuning box... Did you use a balanced tuner or did
>you use a balun on the ladder line...
>I assume I should make my own ladder line out of number 10 copper with some
>decent ceramic spreaders.

If the feeder is 1/2 wl long on 40, you only need to use a choke
balun. You can the use an L network for 80 and 160.

A single relay will switch the system, or you can use two feedlines.

This idea is patent pending and I'll sue....oh never mind.

73 Tom

702. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fa78d.2311816@news.akorn.net>
Source record: 182207
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 09:08:37 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>These are the results for the new IC-756PRO, taken from an RSGB lab
>review (values below S9 are averages of measurements taken every 2 S-
>points):
>
>S1-S3 1.9dB
>S3-S5 2.6dB
>S5-S7 2.5dB
>S7-S9 2.4dB
>S9 - S9+20 13.0dB
>+20 - +40 22.1dB
>+40 - +60 17.9dB

What can you expect from engineers who think weight is the ratio
between dot length and dash length?

If they can't get the keyer correct, they sure aren't going to do the
S meter correctly.

73 Tom

703. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <399fabad_2@news.cybertours.com>
Source record: 182208

"Duane Smith" <jwbest@earthlink.net> wrote in message
news:2olupsk1ej0alama68qnpeh19gps5u4hu2@4ax.com...
> The 40 meter capacitor on my HF6V is broken. Does Butternut
> have a web page? Anyone know the value of the capacitor? I would
> even take one off of a junked Butternut. Thanks for any help.
>
> Jim N7CLV
> jwbest@earthlink.net
>

Duane ,

Butternut's home page is
http://www.bencher.com/ant_select.html
Buttenut is owned by Bencher corp.

But I believe they have all the Parts in stock.
73 dave

704. phraque practices what he preaches .. ignores questions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <k_Nn5.7081$uX.15621@newsfeed.slurp.net>
Source record: 182209

NC's remarks demonstrating mastery-of-the-obvious SNIPPED

NC:

You're acting like a one-trick pony: more tiresome screed about conspiracy, victimhood, threats.

We'd like you to adapt your words and will exclusively to the big world of your dot-com, where, presumably, everyone likes you, and your enervating screeds and bloviations find total acceptance and agreement.

We have a surfeit of accurate and cogent info, and no need of your tiresome, preachy screeds.

It's not a case of liking you or not liking you. Your behavior on this NG could be described like that of a young puppy: no matter where one tries to touch the puppy, there's a set of teeth waiting. Some puppies seem to mature into ill-mannered porcupines.

Provide us yet another dithyramb in response to three questions:

1. Can you stay on-point in your answer to question 2.?

2. In what way or ways do you enjoy and find happiness in subjecting yourself to the NG-milieu of accusations you so wearyingly repeat and repeat and repeat?

3. Is your answer to Q2 off-point?

We await your rejoinder.

K3BHJ

705. Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <20000820062922.23914.00000347@ng-co1.aol.com>
Source record: 182210

Hello,

Seems I have heard may negitive comments on the Outbacker HF Mobile antennas. Anyone out there that actually like the Outbacker for HF Mobile operation? Is it really the much worst then say a Pro-am whip or Ham stick?

Thanks

Jason S. Hulet
W1WOW

706. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Hans Johansson <hans.johansson@mbox345.swipnet.se>
Message-ID: <2rOn5.1828$QY6.20089@nntpserver.swip.net>
Source record: 182211
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

It IS possible to build a loop without a soldering iron. As I see it, the only time when you need one is when you connect the capacitor required for the fine tuning part of it.

But why be afraid of using soldering iron? It is NOT dangerous at all. The thing that may be "dangerous" (?) is to inhale the led smoke while working with it. I think this discussion has gone a bit too far. What might be even more dangerous is all the different radio equipment you may come across while being in the hobby of SWL or Ham radio (or both). Common sense works very well in all cases and also - "what you haven't tried can't be dangerous before you have discovered how easy it actually was".

Hans, Sweden

jason_hsu@my-deja.com skrev i meddelandet <8nmkaeagq1@nnrp1.deja.com>...
>Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
>articles on the ARRL site on loop antenna projects. The loop antennas
>seem to offer decent performance for an apartment, and the fact that
>loop antennas are balanced eliminates the need for an RF ground.
>
>I should note that I don't want to buy a soldering iron (due to the
>fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
>or other dangerous equipment. Also, I have NO experience in
>homebrewing amateur radio equipment. Can I build a loop antenna using
>just simple tools like a screwdriver, hammer, and socket wrenches?
>
>--
>Jason Hsu, KB9PNZ
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

707. Aerial for VLF/LF monitoring

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: "Richard C. Ferryman" <106255.1565@compuserve.com>
Message-ID: <qbdvpsgg6jo8edr9nrgfh8ntotb4gbeqdt@4ax.com>
Source record: 182212

Can anyone suggest an antenna that I could use to feed my spectrum analyser for monitoring between about 50 kHz and 200 kHz. It needs to roughly match the 50 ohm input and be broadband over that range. I had considered a large sinle turn shielded loop fed directly with coax (no capacitors), or a small winding on a large ferrite rod. Any suggestions?
Richard.

708. Re: Homebrew dipole (somewhat of a long post)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399FB8A9.159A6E3A@mindspring.com>
Source record: 182213
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

The point here is a *relative* indication of field strength. So mounting the "antenna" for the meter outside is not going to yield any new information, except perhaps if it could be installed outside the induction field of the transmitting antenna. Relative values will remain the same.

The problem with antennas for 80/75 is implicit in the shorthand. Its the only ham band that is espressed in this schizophrenic way. The change of 500 kc represents a change of almost 15 percent. That same change on 10 meters is only about 1.5 percent. This is why 80/75 antennas are so tricky to tune and so inherently narrowbanded. Find a design that works as well on 3500 as it does on 4000, tuner or no, and you have a real patent on your hands. With a 40 uH roller inductor and a pair of 750 pF caps, I doubt anything I could do with the tuner would help. Longer wires higher in the air would help.

de Will KD7BFX

Rosco wrote:
>
> Will <wcwhite@mindspring.com> wrote in message
> news:399A1059.89EF2FED@mindspring.com...
> > Using a relative field strength meter in conjunction with an SWR meter
> > is a useful approach. Often, you can obtain the same low SWR reading
> > using very different settings of the inductors and capacitors in a
> > matching network, yet one of these will almost always yield by far the
> > highest field strength. It is instructive also that sometimes your tuner
> > acts like little more than a dummy load. On 40 and 15 I peg my FS meter,
> > with its sensitivity turned all the way down. On 80, with the sens.
> > control full CW, I can barely budge the needle no matter what I do. If I
> > relied only on the SWR meter, my feelings might be hurt that no one
> > answers my calls on 80 :)
>
> Wonder if you could change a component in your fs meter to work better on 80
> meters also? Circuit is probably acting like a hi pass network......
>
> How about remote mounting the antenna for the field strength meter outside
> and monitoring it from the shack?
>
> DT-001

709. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399FBA1C.33A2A06B@mindspring.com>
Source record: 182214

As Harry Truman put it at the 1948 Democratic convention: "If you want to live like a Republican, vote for a Democrat."

de Will KD7BFX

710. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8noe5t$m99$1@plutonium.btinternet.com>
Source record: 182215
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Ian, with a lab-measured range of only 62 dB between no indicated signal and receiver overload point, either the receiver under test was stone deaf to signals which would blast through an ordinary receiver well above the band noise, or the RSGB lab is too incompetent to undertake such trials. There's at least 40 dB missing from somewhere.

If the lab reported very little wrong with the receiver then the latter explanation best fits the circumstances.

Reg.

711. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <iePn5.18648$4T.1136542@bgtnsc07-news.ops.worldnet.att.net>
Source record: 182216

Hi Joe,
Sounds like a lot of fun.

> In fact, my only initial complaint is that sometimes it seems too
> strong. Once or twice I wished I could turn down the gain even further.
>Also, LW is useless now; so much AM BCB imaging it sounds like a car radio

Joe do a search of IRCA, NRC, or NASWA they will have plans on how to
build a preselector and an attenuator.They will help get rid of the other
garbage
your radio is giving you. For LW there is a LW association, but I don't
know what it's called. You are covering such a wide frequency range, you
might
make this three preselector projects, SW, MW,LW.

Here's the NRC publications URL http://www.nrcdxas.org/catalog/
and the IRCA URL http://www.geocities.com/Heartland/5792/index1.html

--
Mike Knowlton
Panama City Fl.

712. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <399fbebc.8247520@news.akorn.net>
Source record: 182217
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 11:55:28 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Ian, with a lab-measured range of only 62 dB between no
>indicated signal and receiver overload point, either the
>receiver under test was stone deaf to signals which would
>blast through an ordinary receiver well above the band
>noise, or the RSGB lab is too incompetent to undertake such
>trials. There's at least 40 dB missing from somewhere.
>
>If the lab reported very little wrong with the receiver then
>the latter explanation best fits the circumstances.
>---
>Reg.

Dear Reg,

If you measured some actual S meter's, you'd find they do not start
moving at noise floor.

I was working on a transceiver just yesterday, measuring the receiver.

While the receiver could hear a CW signal at -140 dBm, the S meter did
not budge until -110 dBm or so.

Hope this helps.

73 Tom

713. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <399FC0F4.37D0FE43@mindspring.com>
Source record: 182218

My commentary on your dilemma focuses not on the legal arcana of the situation, but on you househunting technique. I don't know where you are shopping, but CC&Rs are mostly a problem in new developments and subdivisions. I haven't heard many complaints from new owners of houses built before 1980. In the Phoenix area, the housing market is booming, and CC&Rs are the norm. Personally, I find most new home construction ugly, dull, vulgar, and of cheap quality. I drive by a development that sports a billboard that touts prices "from the $180's" for the most shoddy 2x4, plywood, and stucco material. No thanks! I am moving to Seattle at the end of the year, and hope to be in the home shopping mode withing 2 or 3 years after that, and from my preliminary research, CC&Rs will not be a problem. Bear in mind that I am looking at old neighborhoods in the city--not subdivisions in the 'burbs. Clapboard and brick, none of that slapdash house of cards construction for me! I can't imagine buying anything newer than about 1950, and the older the better. There are a few newer houses that are individual, interesting, and well constructed, but not many that aren't "little boxes on the hillside made of ticky-tacky."

As long as people refuse to be good neighbors, which means not only mowing your lawn and not blaring the stereo at 1 a.m., but also means showing some tolerance of difference and individuality, even where that individuality expresses a taste you do not share, until then we will continue to see this trend of CC&Rs progress. Ultimately, we hams will find a way to get out. What is frightening is that CC&Rs are getting more and more invasive and meddlesome, dictating not only what your house looks like from the outside, but the inside as well, and even your lifestyle, friends, past times, religion and politics. Sun City here in AZ was the first "community" to do this, back in the late 1950's, restricting residents' ages. Other developments have insidiously worded deed restrictions that speak indirectly to what a resident can do in his backyard, who can visit and when, who can live there (no children, no same-sex couples, no ummarried heterosexual couples, etc.), a whole litany of behavioral offenses (one that I know of in Florida even banning people wearing bikinis on their own property; many ban playing of musical instruments or outdoor use of power tools). What's next? Republicans-only? No yellow cars? No writers? [they work at home, tsk tsk!]) Where can it end? Who knows, but if there is any justice or common sense left in the world there is a great big backlash coming, led by legions fed up with being prisoners in their own homes, unable to pursue their daily lives.

de Will KD7BFX

jack albert wrote:
>
> Trying to purchase a new house without Antenna restrictions or covenants is
> really difficult and
> I'm a little bit confused on the FCC policies concerning the private
> contractual agreements.
> (I snipped the FCC's comments on a petition that was presented by the ARRL)
>
> I was told by a real-estate agent that restrictions and covenants are
> similar to leans against the property and
> are held as public record at the County Dead Office. They are not signed
> by or agreed to by persons that
> purchase the property. They are adopted by the land developers and I guess
> you can that they are policed
> by the Home Owners Associations!
>
> If I purchase the property and pay cash for it but I don't sign the covenant
> or agreement. How can that be an
> agreement between two parties and how can I be restricted by the covenants?
>

714. Re: What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:20:33 UTC
From: fractenna@aol.com
Message-ID: <20000819202033.16301.00000355@ng-cr1.aol.com>
Source record: 182169

>
>I really don't get it. What is all this Fractenna stuff about. I've
>been watching this news group for a while trying to learn a few things
>from people's input on antennas, and all I read is this stuff (could
>have used a more aromatic word here to describe it) about Fractenna,
>lawsuits, patents, and God knows what. Why don't you all just ignore
>him. All you're doing is feeding him (or them... I haven't really
>figured it out) with a reason to argue and a whole string a subsequent
>replies and more name-calling and bitching...
>
>This seems like poison ivy, scratch it and it still itches but spreads
>like crazy, ignore it and soon enough it will go away... hopefully.

Wayne is right: if it's not for you then ignore it. Let others benefit who have an interest, rather than using it as a vehicle for libel and personal attack!

73
Chip N1IR

715. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:25:15 UTC
From: 2w8ji@contesting.com
Message-ID: <399f238f.53169843@news.akorn.net>
Source record: 182170

On Sat, 19 Aug 2000 20:15:28 -0400, "Peter Bertini"
<commquart@erols.com> wrote:

>I suppose if I am going to go to the bother of a remote tuning box, it would
>be feasible. I don't have a clue how to calculate
>the matching networks since I don't have any modeling programs. (I knew I
>bought that AEA HF analyzer
>for a reason.) Wouldn't the average effective vertical height be lowered by
>the average height of the sloping Vee dipole elements

It will lower the effective height a tiny amount, but not anything
worth worrying about.

I'm assuming you keep the legs pulled apart as far as you can.

> when run on 80/40? What effect would a balun have--or should the balun be
>eliminated in this particular application? It seems
>like it (a balun on the dipole) would try todecouple the dipole elements
>when the feedline is fed as a vertical.

I'd feed the thing with 1/2 wl of ladder line on 40. Then you can do
whatever you like in a box out at the antennas base.

That's what I did on my restricted lot, before I moved.

716. 59 MHz dual dipole help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 00:28:25 UTC
From: Thomas Ashcraft <72632.1427@CompuServe.COM>
Message-ID: <8nn8n9$7m6$1@sshuraac-i-1.production.compuserve.com>
Source record: 182171

I want to build a 59 MHz dual dipole antenna for solar radio astronomy purposes and have a bunch of questions.

Can anyone help me with the dimensions in feet and inches please?

1. What is the correct spacing distance between the two dipoles?

2. What is the correct length for the coax pieces (RG-58) from each di ole to the center feedline union? (I am not sure of the velocity facto of this Radio Shack coax.)

3. Is the length of feedline from the dipole union
into the radio a critical measurement?

4. What is an acceptable height above the ground?

5. Are ferrite toroids necessary for an antenna like this?

Thanks for any help.

Tom Ashcraft
72632.1427@compuserve.com

717. THE FRACTAL FRYER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 01:11:48 UTC
From: accrider3@aol.comnospam
Message-ID: <20000819211148.29657.00000197@ng-fg1.aol.com>
Source record: 182172

Hey chirpster let the Colonel know about a new product the Fractal Fryer guaranteed to fry chicken with excess rf absorbed into the ground.
Initial test have shown a remarkable decrease in cooking time by placing the chicken under the fractal fryer. The preliminary tests show the rf going to the ground of course after nuking the bird and due to its low profile many birds can be done simultaneously.
This could be an advantage for third world countries and as always patent applied for and any slander about the fryer will be dealt swiftly and harshly by my lackeys in the legal department. <g>
73 de Da Boid

718. Re: will this make a decent ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 01:19:01 UTC
From: k6mhe@arrl.net
Message-ID: <399f318a.43421332@news.mcn.org>
Source record: 182174

On Sat, 19 Aug 2000 19:39:25 -0400, Wayne Grauel
<wgvideo@attglobal.net> wrote:

>Hi folks. I just set up my ham shack using a Kenwood ts-440s with a
>dentron mt3000a tuner going to w G5RV. I have a good size spool if #12
>AGW stranded copper (insulated). Will that be a sufficient ground.
>it's going about 20 feet or so down to and across the floor joists and
>out to the ground rod that the electrical system is hooked to. there's
>no closer route to the outside and the ground rod is right there so
>there really aren't any other options. Unless you're going to tell me
>to sink a separate rod. I don't know so that's why I'm asking.
>
Wayne,

If it is a RF ground you are seeking then a ground rod is a poor
choice. Let along a single one.....

Suggest you do a search in Deja View on the subject... You'll find
many bit of good information there.

73
Danny, K6MHE

719. Re: Who sells the Plastic XYL's ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 01:48:44 UTC
From: cathexis@erols.com
Message-ID: <399f3826.79697956@news.erols.com>
Source record: 182173

On Sat, 19 Aug 2000 11:05:15 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>Set'em up Joe,
> Careful there Joe! Just like the 'live' ones,
>one 'sharp' answer, and they'll 'blow up' on you!
> 'Doc

Gee Whiz, guys! I don't want an Inflatable.
I've already got too much of the real thing. No, I
want one of those plastic decoy XYLs. After all, I
want the crows to git, not be trying to hump her!

What's a OM gotta do,

Andrew
KG4JBM

720. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 02:21:35 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <PgHn5.2114$kM2.257370@newshog.newsread.com>
Source record: 182175

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Arthur Unwin" <aunwin@fgi.net> wrote in message
news:399EFA06.C4A0EB53@fgi.net...
> Agreed Tom.
> Beams made of concrete and reinforcement wires
> are done that way for a reason.
> I cannot understand why one
> would use a hollow tube as a guy post without the addition of concrete.
> I use 4inch diameter posts for at least 20 years on my fold over 45 g
> and they are filled with compressed concrete and present no problem with

Going back to my original post...., or the one after it, or one some where in there... I mentioned reinforcing and pouring. Either rerod and concrete, or more likely I-beam and pouring, and moving at least the top tier of guys down to the concrete.

As I recall the bending moment is around 4500#
But will drop to about half that with the top two tier being moved to the concrete.

>
> lifting or lowering my 80 foot boom and prop pitch rotor
> which is quite heavy. But we may be missing the real point of the
> problem.

Well, actually I was looking for the best method for reinforcing the posts and locating the anchor points.

Roger (K8RI)

> Regards
> Art Unwin KB9MZ
>
> Tom W8JI wrote:
>
> > On Sat, 19 Aug 2000 02:27:19 GMT, "Roger Halstead" <rdhalste@tm.net>
> > wrote:
> >
> > >Any suggestions?
> > >
> > >Roger Halstead (K8RI) www.RogerHalstead.com
> > >N833R World's Oldest Debonair? s# CD-2
> >
> > Back guy the guy posts to some fairly deep expandable anchors.

> >
> > If I were you, I'd calculate some bending moments on those posts.
> >
> > 73 Tom
>

721. Re: Fracsybil likes to post email

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 02:44:21 UTC
From: VK2KCE <hrbe@dingoblue.net.au>
Message-ID: <399f4555$0$784$7f31c96c@news01.syd.optusnet.com.au>
Source record: 182176

List,
Can anyone tell me whether they have been contacted by NC's
lawyers/attorneys/legal eagles re his threat to sue/admonish/etc????

Would be interesting to compare notes

John McLean
VK2KCE
Australia
...
>
> I laugh in your face Nathan. I have no obligation to send squat to
> your virtual attorney.

722. Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 02:53:58 UTC
From: cathexis@erols.com
Message-ID: <399f3900.79916057@news.erols.com>
Source record: 182177

Greetings,

First of all, Big THX to all who replied regardless of
your views on horizontal loops. I don't have the knowledge
or experience to debate tech. with you but I would like to
share some preliminary results (very preliminary).

The idea was to try replacing a 66ft. random wire
with *something* like the "Loop Skywire" proj. as per A.R.R.L.
Hndbnk. Intended usage is for recieve only. Terminus is a RS
DX-392 which accepts any antenna as long as you can squeeze
it into a simple phono plug jack. No separate GND. jack is offered.
Proper GND for the antenna would mean disconnect ant. after use
and hook to more proper ground rod,etc. The phono jack leaves
you with a gnd wire you either hook to external gnd or let dangle.
Posi. pole of course plugs into radio. At least, that's my understanding.

The "Loop" was hardly a loop. Basically, it's wire only(no insulators)
thrown up through 4 trees and crossing my roof twice (close, but no contact).
The geometry is more like a trapazoid. The following measurements are approx.
Perimeter: 220ft. Base: 90ft.; Then 60/66/40 on around. Yes. I know, numbers
don't exactly add up. Finished at twilight so some wire I could no longer see.
Anyway, pretty close to half way betw'n 1wavelength 40M vs. 80M. This was
close to what I wanted. Perhaps even worse to you purists: First thing I
discoverd about slingshoting wire into trees?? Altitude varies hugely from tree
to tree in terms of what branches are "do-able". So therefore this loop is
slightly folded vertically as well. North and South it goes down to 20ft/25ft.
East it rises to 30 ft. West it goes at least to 50+ feet.

Hook up?? Not much. It was dark by then. Still, I had to know, Dud
or not? With 15 to 20 ft. of ends dragging on the ground, I just stripped the
ends without trimming and twisted (no solder, not even elec. tape) it onto
my phono plug leads. Bare wire leads left lying on the carport. Sloppy as heck.

Results? OUTSTANDING ! To be honest, I've no idea what the prop.
report is for today; I've been too busy to check. Weather is good here: Cool and
clear. Moderate clouds, temp 68F. But man what a sound! First of all Radio
Kuwait. Before: Max. Gain, Half volume for easy listening. Tonite MINIMUM gain
and low vol. and it's booming. The "strength indicator" on the DX-392 goes from
S-1 to S-7 (just a led display folks). Radio Kuwait was at S-5 on min. gain. A
ham from Brazil on 40M was "S-3" on min. gain, half vol. for easy listening.
Same thing for a ham from Riverside, CA. on 20M. Radio Sweden 13675 (I think)
S-5 and booming, same thing. Finally heard some reasonably clear QSO's on
80M. 'Bout time. How would a anenna. tuner help??

In fact, my only initial complaint is that sometimes it seems too strong. That is, signals before which were fainter were without competition. Now it seems like there *may* be more RFI from nearby (freq.-wise) stations bleeding into other stations.Like you'd gone from narrow-band to wide band tuning. Once or twice I wished I could turn down the gain even further. Also, LW is useless now; so much AM BCB imaging it sounds like a car radio. Is it a true loop? Or just a longer, higher random wire? Whatever it is I'm seeing big initial gains and am heading right back out there after this post to see just what else it might give me. I'n gonna DX tonite!

Sincere thx. to you all,

Andrew
KG4JBM

I'll post more when I know more. Your feedback is welcome and wished for.

723. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 03:12:19 UTC
From: Jim Hahn <jimboL51@home.com>
Message-ID: <399F4C1E.A38EA572@home.com>
Source record: 182178

Jim,

You didn't live near a Tom Baumann by any chance in Tierrasanta? He was the dentist who I bought my practice from in Kensington. He has a daughter who lives on Esmeradas. Live with my wife in Rancho del Rey in Chula Vista. Am currently driving Ron crazy at HRO regarding antennas made commercially that I can conceal (I know right!). Was wb6rqf years ago at the age of 16; just got my extra license back about 4 years ago - always loved code; am just now getting back into amateur radio with a Heath HW-8, Apache, and Mohawk. What do you think about this Bilal Isotrons? Thanks. Jim

724. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 03:22:37 UTC
From: raiar@slacc.com.nospam
Message-ID: <399f4d52.27207264@news.galilei.com>
Source record: 182179
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi Jason

Back when I lived in an apartment, I had a loop in every room, some that even encircled the perimeter of the whole apartment.
All of them were totally invisible, even to the eagle eye of the landlord.

Even nicer, they didn't require a single tool, other than a scissors and you could have done without that too!

All I did was put up copper self adhesive foil under the ceiling on the wall. I used copper so I could solder the coax to it easier, but you could use aluminum tape and a small screw to affix the coax.
Once it was taped up, I just painted over it and it became invisible.
I ran the coax down the corner bead and covered it with caulk and tucked the rest under the baseboard behind the carpet tack strip to the shack.

I did drill holes in the walls and in some cases cut a groove in the corner to hide the coax under the drywall corner then retaped and jointed the corner back to square for the perimeter run.

TTUL
Gary

725. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 03:26:39 UTC
From: raiar@slacc.com.nospam
Message-ID: <399f4fb6.27820109@news.galilei.com>
Source record: 182180
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

>Any attempt to build a small transmitting loop antenna without using a
>soldering torch or even a welder will be a waste of effort.

I don't know about that, been using alligator clips for years on
portable loops.

TTUL
Gary

726. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 04:08:14 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <OQIn5.2131$kM2.259046@newshog.newsread.com>
Source record: 182181

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Arthur Unwin" <aunwin@fgi.net> wrote in message
news:399F4A64.CD2F9270@fgi.net...
>
>
> Roger Halstead wrote:
>
> > Roger Halstead (K8RI) www.RogerHalstead.com
> > N833R World's Oldest Debonair? s# CD-2
> >
> > "Arthur Unwin" <aunwin@fgi.net> wrote in message
> > news:399EFA06.C4A0EB53@fgi.net...
> > > Agreed Tom.
> > > Beams made of concrete and reinforcement wires
> > > are done that way for a reason.
> > > I cannot understand why one
> > > would use a hollow tube as a guy post without the addition of
concrete.
> > > I use 4inch diameter posts for at least 20 years on my fold over 45 g
> > > and they are filled with compressed concrete and present no problem
with
> >
> > Going back to my original post...., or the one after it, or one some
where
> > in there... I mentioned reinforcing and pouring. Either rerod and
concrete,
> > or more likely I-beam and pouring, and moving at least the top tier of
guys
> > down to the concrete.
>
> Well if you are feeling movement on the tower I would certainly anchor to
the
> ground
> with that said the idea of posts seem redundent.If posts have to
> be used and I particularly like them because the kids would trip over the
wire
> I would be inclined to still use tubular posts with concrete well tapped
in for
> compression
> resistance and buckling prevention since it is the feel of excess
deflection
```

> that you are sensing
> and the concrete should provide the stiffness required in your existing
posts.

I do have experience with concrete alone being quite elastic.
You mention using concrete well tamped in. I'm assuming you mean poured in
the semi liquid state and tamped with a vibrator? (and a fairly rich mix
using pea gravel as the largest stone?)

> Combination of concrete with an I beam does provide a series of other
problems,

This is one thing that I've not worked with before.
If I can find an I-beam that will just fit inside it would go all the way to
the bottom of the concrete while any external welding will only go down to
the concrete.

> If the I beam alone will not do the job I would look elsewhere

The I beam can be welded to the front, inserted full length, and I can use
it as a buttress to the front, weldes in as an A-frame...

> Standard thinking is to always stay the posts as Tom mentioned but it does
> provide more clutter.

Not an option
The top two tier can be anchored at the base of the post as in a regular
instalation.

One thing I've noted is that as the Kevlar (Phillistrand) guys have time to
"set" there is less and less movement. There was very little to begin with,
but doing a lot of climbing I did notice. Compared to many, if not most ham
towers I've climbed it's rock solid. <:-))

> Of course to be sure then one has to determine Second moment of Area for
both
> arrangements
> and substitute in
> M/I = f/y= E/r, at your own risk. Especially if you are unfamiliar with
the
> above series of structural calculations as aplied to beams in encastre

I am, which is why I posted the question.
I'm a retired computer jockey/project manager with a minor in math, not an
engineer. <:-))

Roger (K8RI) (and I do appreciate the suggestions and help)

> .
> Regards
> Art Unwin KB9MZ
>
> >
> >

> > As I recall the bending moment is around 4500#
> > But will drop to about half that with the top two tier being moved to
the
> > concrete.
> >
> > >
> > > lifting or lowering my 80 foot boom and prop pitch rotor
> > > which is quite heavy. But we may be missing the real point of the
> > > problem.
> >
> > Well, actually I was looking for the best method for reinforcing the
posts
> > and locating the anchor points.
> >
> > Roger (K8RI)
> >
> > > Regards
> > > Art Unwin KB9MZ
> > >
> > > Tom W8JI wrote:
> > >
> > > > On Sat, 19 Aug 2000 02:27:19 GMT, "Roger Halstead" <rdhalste@tm.net>
> > > > wrote:
> > > >
> > > > >Any suggestions?
> > > > >
> > > > >Roger Halstead (K8RI) www.RogerHalstead.com
> > > > >N833R World's Oldest Debonair? s# CD-2
> > > >
> > > > Back guy the guy posts to some fairly deep expandable anchors.
> > > >
> > > > If I were you, I'd calculate some bending moments on those posts.
> > > >
> > > > 73 Tom
> > >
>

727. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 04:37:45 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <399F6015.8D9CD576@att.net>
Source record: 182182
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Jason, I get the feeling that you are really not all that familiar with the operation of soldering. Perhaps you are equating it to arc welding or some equally spectacular process.

To the contrary, most soldering of electronic equipment and components is noiseless and extremely safe provided that only common sense precautions are taken. I have been "flogging solder" as we used to say for over 55 years now and cannot yet show you a single burn scar. And I started back in the days when a 100-watt iron was considered "delicate" and for small work. The big iron for the regular stuff was 250 or 350 watts and weighed a few pounds.

No, I think that you need to visit a ham or even an electronics shop and observe in person what soldering amounts to. I suspect that you will find it to be a big anti-climax to what you might be expecting.

Hang in there!

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

"Gary V. Deutschmann, Sr." wrote:
>
> >Any attempt to build a small transmitting loop antenna without using a
> >soldering torch or even a welder will be a waste of effort.
>
> I don't know about that, been using alligator clips for years on
> portable loops.

728. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 04:43:04 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F61D8.995ECAF2@cac.net>
Source record: 182183

Fractenna wrote:

> >Salut,
> >
> >It is very unlikely for a company to make such a statement out of the
> >cold.
> >
> >The truth is Doctor Fractenna upsetted several major companies,
> >pretending they were going to use Freactennas on a large scale.
> >
> >
> >--
> >Gilbert.
> >
> Nonetheless, it is the truth; I stake my career on its veracity.
>
> NC

Hrm... Veracity? Don't you mean validity? Veracity doesn't mean truth, it has a wholly different meaning... I guess such an educated man as a PhD (Piled Higher and Deeper?) would know something of this sort.

Just my two cents.

-SSB

729. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 04:43:43 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F61FF.542CCB8D@cac.net>
Source record: 182184

Gilbert Mouget wrote:

> 19 Aug 2000 19:24:52 GMT dans l'article
> <20000819152452.16044.00000385@ng-fy1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
> > >Salut,
> > >
> > >It is very unlikely for a company to make such a statement out of the
> > >cold.
> > >
> > >The truth is Doctor Fractenna upsetted several major companies,
> > >pretending they were going to use Freactennas on a large scale.
> > >
> > >
> > >--
> > >Gilbert.
> > >
> > Nonetheless, it is the truth; I stake my career on its veracity.
>
> So we agree on this point. FB (Fine biznes)
>
> 12.5 (73 in Euro)
>
> --
> Gilbert.
>
> ____ ____ _____ __ __ __ __ ____ ____ ____ /\
> (_ _)(_ \(_)( ) ( ) /__\ ( ) (___)(_ \(_ _))(
>)( ) /)(_)( )(__)(__ /(__)\ )(__)__)) /)(\/
> (__) (_)_)(_____)(____)(____) (__)(__)(____)(____)(_)_) (__) ()
>
> Look, spies watching freactenna making:
>
> '*` ((_ xxx _/7 _/7
> (o o) (o o) (o o) (o o) (o o)
> ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-
>
> _
> ___ _/7 +++ ((_ '*`
> (o o) (o o) (o o) (o o) (o o)
> ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-ooO--(_)--Ooo-

FIGLET! ::cakcle:: I love Figlet. It makes the KEWLEST ascii graphics.

-SSB

730. Re: Fracsybil likes to post email

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 04:49:19 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F634F.B747FD4A@cac.net>
Source record: 182185

VK2KCE wrote:

> List,
> Can anyone tell me whether they have been contacted by NC's
> lawyers/attorneys/legal eagles re his threat to sue/admonish/etc????
>
> Would be interesting to compare notes
>
> John McLean
> VK2KCE
> Australia
> ...
> >
> > I laugh in your face Nathan. I have no obligation to send squat to
> > your virtual attorney.

I can say I have not.

-SSB

731. Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:11:56 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F689C.B7DE9C74@cac.net>
Source record: 182186

I remember reading, a few years ago, about longwire antennas... I seem to remember reading how many wavelengths it took before SWR was no longer an issue, but I've forgotten where I read it, and how many waves it was. I'm considering this in lieu of the dipole which was exhaustively discussed in an earlier thread.

Does a longwire require a ground plane? How are they fed? Will I need a balun or anything of the sort to use one? Will placing one on and/or slightly under the surface of the ground affect its performance?

Any help will be greatly appreciated. Many thanks in advance.

73's

-SSB

732. Re: Fracsybil likes to post email

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:23:34 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <399F6C02.94864A80@earthlink.net>
Source record: 182188

I was threatened,

sideband wrote:
>
> VK2KCE wrote:
>
> > List,
> > Can anyone tell me whether they have been contacted by NC's
> > lawyers/attorneys/legal eagles re his threat to sue/admonish/etc????
> >
> > Would be interesting to compare notes
> >
> > John McLean
> > VK2KCE
> > Australia
> > ...
> > >
> > > I laugh in your face Nathan. I have no obligation to send squat to
> > > your virtual attorney.
>
> I can say I have not.
>
> -SSB

733. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:27:37 UTC
From: cathexis@erols.com
Message-ID: <399f6837.92004967@news.erols.com>
Source record: 182187

On Sun, 20 Aug 2000 02:53:58 GMT, cathexis@erols.com (Set'em up Joe) wrote:

>Greetings,
>
>
3 new catches tonite on the Skywire:

FEBA Radio Seychelles 11885 around 0345UTC
Voice of Guyana 3289 and
Radio Botswana 7255/4820 betw'n 0315-0400

All confirmed by station ID. Note the low freqs.
on the last two. A product of the new antenna's
length I assume.

Also, heard several QSO's on 160M. Fair amount
of static, but easily understood. First time I've heard
much of anything intelligible on 160M. Lots of
contesting from 160 up to 20 at least.

Perhaps not related to the new ant., heard what I
think might've been a slew of pirates betw'n 6952
and 6955. Hard to tell as there were too many
competing stations to swear it wasn't just harmonics
from elsewhere. Still, sharp drop to noise only below
6950 or above 6956. Also, some guy, fading in and
out, was really laying into Gore (no obsenities though).
Your guess is as good as mine.

73,

Andrew
KG4JBM

734. Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:35:59 UTC
From: Duane Smith <jwbest@earthlink.net>
Message-ID: <2olupsk1ej0alama68qnpeh19gps5u4hu2@4ax.com>
Source record: 182189

The 40 meter capacitor on my HF6V is broken. Does Butternut
have a web page? Anyone know the value of the capacitor? I would
even take one off of a junked Butternut. Thanks for any help.

Jim N7CLV
jwbest@earthlink.net

735. Yaesu 1000SDX rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:38:22 UTC
From: David <phochief@adelphia.net>
Message-ID: <i9Kn5.544$yN3.28389@news1.news.adelphia.net>
Source record: 182190

Can anyone tell me how the Yaesu 1000SDX rotor compares to a Ham IV? Is
it as
good, maybe better? Are the mounting holes the same as the Ham IV?

Any advice is appreciated.

David, K4ZZR

736. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:47:15 UTC
From: sideband@mindspring.com
Message-ID: <399F70E3.FC50FBBF@mindspring.com>
Source record: 182191

People and companies don't usually contact you just to tell you they won't use your product. I have never called Acer computers to tell them I have heard bad things and refuse to buy their product. Sounds like a lie to me.

Fractenna wrote:

> >Let me get this right, A major telecom firm contacted him to tell him
> >that one of their chief engineers wouldn't have anything to do with the
> >technology? THAT is strange!
> >
> >Dave, Kc6old
> >
> Yes, based upon the 'fractal chat' on the newsgroups.
>
> He wasn't referring to my responses either.
>
> 73
> Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to use a
spell checker and don't take criticism well.

737. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 05:58:24 UTC
From: sideband@mindspring.com
Message-ID: <399F7380.778EF338@mindspring.com>
Source record: 182192

I just couldn't get out of bed in the morning knowing that many people hated me.....

Fractenna wrote:

> >NC:
> >
> >What *would* lead in some way to your contributing to a new chapter in the
> >history of this NG, by simply leaving it?
> >
> >Would you consider entering democrat politics, where your desires to
> >demonize the holders of opposing opinions, and your tiresome bloviations
> >about vast conspiracies, lawsuits, and victimhood, would probably find an
> >eager
> >audience?
> >
> >Can we help you find your way out, pls?
> >
> >Why would a person such as yourself want to subject himself to the milieu
> >you describe?
> >
> >Take your own excellent advice.
> >
> >Stop reading the materials here.
> >
> >Stop posting to the NG here.
> >
> >Go away to the dot-com you have created and stay there.
> >
> >We here have enough intestinal and other fortitude to do without your
> >presence on the NG.
> >
> >We do not wish you ill.
> >
> >We wish nothing more than for you to get out, stay out, and don't come back.
> >
> >Is there any part of 'get out, stay out, and don't come back' that you do
> >not understand?
> >
> >If so, ask your attorney to explain the phrase.
> >
> >Take fill dirt, the Zero Knowledge Transferable character, with you.
> >
> >K3BHJ
> >**********

> >
> >NC bloviated, in part, somewhere, about this NG:
> >
> >Copyright violation; impersonation; libel;prevarication about proper
> >copyright
> >and pending patent notification; misleading and incorrect assessment; and so
> >on
> >will NOT lead in any way to my leaving this NG.
> >
> >If you do not wish to read the materials, then don't.
> >
> >What has resulted from this abuse is a new and global interest in exactly
> >the
> >kind of mischief that has been promulgated here. I will actively assist any
> >and
> >all scholars, legal types, and press who want to investigate this active
> >attempt to destroy a new technology and the inventor and company that go
> >with
> >it.
> >
> >To my knowledge, this is a new chapter in the history of the internet.
> >
> >NC
> Dave,
>
> Life is an adaptive system.
>
> Accept the fact that this is a big world, and not everyone will like you, and
> visa versa.
>
> But that gives no one the right to use whatever steps--such as: impersonation;
> accusations of fraud; accusations of mental illness; accusations of bizarre
> sexual engagement; copyright infringement; inaccurate and deliberately
> misleading data comparisons; threats of getting someone fired; and on and on
> (just of the few of the issues in the last month) to IMPOSE one's will of
> 'getting someone off the newsgroup'.
>
> I am here to enjoy myself and provide accurate and cogent info. As long as I am
> capable of this, I am happy to be here.
>
> Hope this helps.
>
> 73,
> Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to use a

spell checker and don't take criticism well.

738. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 06:42:32 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F7DD8.3784CA86@cac.net>
Source record: 182193

No doubt...

Of course, I'm not the same sideband as the one at mindspring.com...

::grin:: I approve of your choice of nomiker.

73's

-SSB

sideband@mindspring.com wrote:

> I just couldn't get out of bed in the morning knowing that many people hated
> me.............
>
> Fractenna wrote:
>
> > >NC:
> > >
> > >What *would* lead in some way to your contributing to a new chapter in the
> > >history of this NG, by simply leaving it?
> > >
> > >Would you consider entering democrat politics, where your desires to
> > >demonize the holders of opposing opinions, and your tiresome bloviations
> > >about vast conspiracies, lawsuits, and victimhood, would probably find an
> > >eager
> > >audience?
> > >
> > >Can we help you find your way out, pls?
> > >
> > >Why would a person such as yourself want to subject himself to the milieu
> > >you describe?
> > >
> > >Take your own excellent advice.
> > >
> > >Stop reading the materials here.
> > >
> > >Stop posting to the NG here.
> > >
> > >Go away to the dot-com you have created and stay there.
> > >
> > >We here have enough intestinal and other fortitude to do without your
> > >presence on the NG.
> > >
> > >We do not wish you ill.
> > >

> > >We wish nothing more than for you to get out, stay out, and don't come back.
> > >
> > >Is there any part of 'get out, stay out, and don't come back' that you do
> > >not understand?
> > >
> > >If so, ask your attorney to explain the phrase.
> > >
> > >Take fill dirt, the Zero Knowledge Transferable character, with you.
> > >
> > >K3BHJ
> > >**********
> > >
> > >NC bloviated, in part, somewhere, about this NG:
> > >
> > >Copyright violation; impersonation; libel;prevarication about proper
> > >copyright
> > >and pending patent notification; misleading and incorrect assessment; and so
> > >on
> > >will NOT lead in any way to my leaving this NG.
> > >
> > >If you do not wish to read the materials, then don't.
> > >
> > >What has resulted from this abuse is a new and global interest in exactly
> > >the
> > >kind of mischief that has been promulgated here. I will actively assist any
> > >and
> > >all scholars, legal types, and press who want to investigate this active
> > >attempt to destroy a new technology and the inventor and company that go
> > >with
> > >it.
> > >
> > >To my knowledge, this is a new chapter in the history of the internet.
> > >
> > >NC
> > Dave,
> >
> > Life is an adaptive system.
> >
> > Accept the fact that this is a big world, and not everyone will like you, and
> > visa versa.
> >
> > But that gives no one the right to use whatever steps--such as: impersonation;
> > accusations of fraud; accusations of mental illness; accusations of bizarre
> > sexual engagement; copyright infringement; inaccurate and deliberately
> > misleading data comparisons; threats of getting someone fired; and on and on
> > (just of the few of the issues in the last month) to IMPOSE one's will of
> > 'getting someone off the newsgroup'.
> >
> > I am here to enjoy myself and provide accurate and cogent info. As long as I am
> > capable of this, I am happy to be here.

> >
> > Hope this helps.
> >
> > 73,
> > Chip N1IR
>
> --
> The preceding may or may not have been authored by myself but I offer it to you for
> your perusal.
> Feel free to read as little or as much of it as you like. Be forewarned that I
> refuse to use a
> spell checker and don't take criticism well.

739. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-20 06:53:41 UTC
From: sideband <sideband@cac.net>
Message-ID: <399F8075.70A40984@cac.net>
Source record: 182194

Roy Lewallen wrote:

> sideband wrote:
> >
> > Hrm... Veracity? Don't you mean validity? Veracity doesn't mean truth, it
> > has a wholly different meaning... I guess such an educated man as a PhD
> > (Piled Higher and Deeper?) would know something of this sort.
> >
> > Just my two cents.
> >
> > -SSB
>
> Looks to me like Chip used the word correctly.
>
> ve-rac-i-ty 1. Devotion to the truth : TRUTHFULNESS 2: power of
> conveying or perceiving truth 3 : conformity with truth or fact :
> ACCURACY 4 : something true <makes lies sound like _veracities_>
>
> -- Merriam Webster's Collegiate Dictionary, Tenth Edition. Every poster
> should have a copy, regardless of degrees or lack thereof.
>
> Roy Lewallen, W7EL

Ok.. I stand corrected... I suppose I was thinking of tenacity when I posted.
My apologies.

-SSB

740. Re: House loop. Insulators required?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A1B5C9.292D26A7@oio.net>
Source record: 181919

TR,
At QRP, it ought to work. Of course, insulators wouldn't
hurt anything.
'Doc

741. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a1b6f9.47632515@news.akorn.net>
Source record: 181920

On 21 Aug 2000 19:15:18 GMT, n8blk@aol.com (Art Clemons) wrote:

>In article <39a13959.15468255@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI)
>writes:
>
>>Actually if you look at the results in shootouts, it is the large
>>capacitance hats that make the most difference. The larger the hat,
>>the less critical coil location and type becomes.
>
>But Tom, the difference between the best whip and the best Capacity hat is only
>one to two dB. Yes, the difference is reproducible, but I'ld bet that putting
>a capacity hat sufficiently spaced above a one inch diameter wouldn't make the
>one inch center fed coil better than someone with a 5 inch diameter coil &
>whip(once again center fed).

Hi Art,

The problem is, as you seem to also understand, that the test data is cluttered because so many things change.

But I have made my own measurements here a few years ago when I was optimizing my antennas for my mobile. The limiting factor, or perhaps better called the "big equalizer", is the loss resistance in the ground system offered by the vehicle.

I don't have the numbers in front of me, because the data was taken maybe six years ago or longer, but my supercab long bed F-150 truck was about 25 ohms on 160 meters, and about 10 or 15 ohms on 80. It was several ohms on 40, and only looked like a good ground above twenty meters.

Because of that, it made little sense to make coil resistance (ESR) lower than maybe 25% or so of the ground resistance. Doing so resulted only in the smallest change in FS.

Adding a capacity hat, or moving the coil up high in the system, made the largest difference. That's because the radiation resistance increases by a factor of four when the system goes from pure base loading with a uniform conductor to top loading, so efficiency when ground losses dominate increase by nearly the same amount.

Of course the hat, if large enough, allows you to move the coil to any location (as long as the strong electric field is kept away from the chassis, and not coupled directly across the coil) without changing efficiency. That's because the amount of current flowing into the hat is the bulk of current flowing into the antenna on lower bands.

Now if you move the coil up on the antenna and use a small whip, coil Q is important. But the use of large diameter wire becomes limited! That's because self-resonance of the coil approaches the operating frequency, and circulating currents in the inductor kill Q.

The higher the reactance required in the coil, the longer and smaller diameter the optimum form becomes in the coil. That general limits the guage of conductor, becuase the diameter of the coil must be large compared to the wire diameter or eddy currents and stay capacitance kills Q.

Physically larger coils with large conductors are not always better, they can actually be worse than smaller guage wire in a more optimized form.

Bigger coils, with a L/D approaching 1:1 and heavy wire are most useful when reactance is low, such as in a system with a large hat or base loading....but unfortunately the higeher Q isn't needed then because reactance is so low the a modest Q siply doesn't add too much difference in ESR of the system.

That's why, despite all the various combo's, there are no "big winners". There are only a few big losers. Almost anything you do with a lot of top loading by a hat termination will win, although a properly and painfully engineered non-hat antenna can come close to a sloppy (or well done) system with a big hat.

73 Tom

742. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a1bca2.49081965@news.akorn.net>
Source record: 181921

On Mon, 21 Aug 2000 15:18:28 GMT, cathexis@erols.com (Set'em up Joe)
wrote:
>
> I've definitely identified a major source of RFI:
>It's 1310 WDCT, a all Korean AM BC station. It's small,
>only 5Kw I think. But it's offices are only a mile from my
>house, though I haven't spotted a tower as yet. I can
>definitely hear harmonics spilling over at least from
>200 Khz approx. up into the 160M band. Awful!!

Andrew,

I came into this late. I've turned in a dozen AM BCB stations with problems, and some "busts" have made national press.

You peaked my interest because about a year ago I turned in a Korean AM BC station in the Meadowlands in NJ. It was mixing with a transmitter from WBBR in the Meadowlands, and coming out on 1830 kHz. The mixing was in the Korean programming stations transmitter.

The FCC got them to correct the problem, after a visit.

I'm curious where you live, and hope the transmitter is not the same one back to the same tricks. Clue me in, what city are you in?

I'll listen from here, and see what I can hear. I can hear a few milliwatts of signal on a quiet night even from a thousand miles away on 160 meters, because I have very large arrays for receiving. I'm in middle Georgia.

73 Tom

743. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000821194809.09192.00000886@ng-cb1.aol.com>
Source record: 181922

>> Fractenna wrote:
>> I am here to enjoy myself and provide accurate and cogent info. As long as
>I am
>> capable of this, I am happy to be here.
>
>If you were capable of only providing accurate and cogent info, and none
>of the rest, everyone else would be happy you were here too.
>
>ac6xg
>

That is what I do Jim; it comes from years of training and experience--as well as a strong ethic inculcated into me from childhood.

73
Chip N1IR

744. Yagi and Dipole Spacing.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: ^ <rjc100@attglobal.net>
Message-ID: <39a1c5e6_2@news1.prserv.net>
Source record: 181923

I want to put up a Mosley TA33 triband (20 - 10 meters) on a 48 foot tower.
I want to put a G5RV off a side arm under it.
What is correct spacing/ height to put G5RV?????
Thanks

745. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39A1C490.47E72914@uci.edu>
Source record: 181924

Fractenna wrote:
> >If you were capable of only providing accurate and cogent info, and none
> >of the rest, everyone else would be happy you were here too.

> That is what I do Jim; it comes from years of training and experience--as well
> as a strong ethic inculcated into me from childhood.

If that was indeed what you do, then you wouldn't have to always tell
people that that's what you do.

Get it?

73 de ac6xg

746. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <MYjo5.1538$5F6.48994@news-west.usenetserver.com>
Source record: 181925

Jim Bo wrote in message <39A033D6.83A7F750@ix.netcom.com>...
>Hello,
>
>I read many many years ago about a method of grounding a ham radio
>transmitter that is located on the second floor of a house.

For an RF ground, the best connection is a very short braid or strap to a good ground such as several ground posts.

If this is not possible, as for a shack on the second floor, Make the ground connection with a wire or strap which is a half-wave long. In theory, the ground potential is repeated each half wave. For multi-band operation, use several "ground leads" in parallel, one a half wave at band one, a second a half wave at band two, and so on.

The method isn't perfect, but has worked well for me for many years and a number of installations, some using end fed antennas.

bob w4mb

747. Re: House loop. Insulators required?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: TR <w7trx@mindspring.com>
Message-ID: <8nsi7joat1@nntp9.atl.mindspring.net>
Source record: 181926

Doc,

> TR, At QRP, it ought to work.

How about at 100 watts?

>>Of course, insulators wouldn't hurt anything.

Ideally I'd just put up the insulators. But, I have some medical limitations and using the staples is much quicker and physically easier work for me. Additionally, I believe stapling would be a bit more stealthy than insulators holding the wire off the house.

Thanks,

TR

748. Re: House loop. Insulators required?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A1D2EB.D7E70A26@oio.net>
Source record: 181927

TR wrote:
>
> Doc,
>
> > TR, At QRP, it ought to work.
>
> How about at 100 watts?
>

That ought to work okay. I don't think I'd try much
more than that, not that I'd worry about burning the house
down, but because of the possible RFI on stuff in the house.
'Doc

749. Car. RFI. Solution.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <39A1D2CA.D74B4426@agilent.com>
Source record: 181928
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,,rec.radio.amateur.equipment

I didn't know what single newsgroup to post this on; please forgive the multiple groups.

Ever since I bought the car (a 1993 GMC pickup), there was a pulse-type digital noise audible on the AM receiver which raised the noise floor by 10-20 dB. Maybe more. AM DXing was out of the question, and even in-city listening was frequently not possible or at least annoying.

A few years ago, I tried removing the antenna to clean corrosion on the ground connection to the truck body. This seemed to me to help. I would guess that I may have lowered the offending noise by 2 or 3 dB.

More troubleshooting over the years led to the discovery that the coax from the whip to the RF deck (mounted low in the dash approximately mid-cab) passed right behind the behind-the-glovebox computer. I guessed that this was the pickup mechanism, so I put several of those split ferrite cores around all of the leads in and out of the shielded CPU box. But this didn't work at all.

I left it alone for a few years, and then last month something got into me to try one more time. I located the coax coming into the RF deck, and I took all of those split ferrite cores that were doing nothing and clamped them right over the coax cable where they entered the RF deck. I was able to fit four or five of them onto the antenna cable before my fingers just ran out of room trying to reach up into the dash. This worked so well that I took a long drive just to hear what the radio was doing! The receiver was so quiet it was astonishing. AM DX is now a definite possibility.

Many of you will recognize that essentially what I did by using the split ferrite RFI suppressors is construct a kind of a W2DU balun. I posted this in the hopes that some of you suffering RFI in the car will benefit from this. Good luck!

R,

Al W6LX

750. Dualband Base for Tree??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Frizz <senorpurpl@hotmail.net>
Message-ID: <8nsl7p$bs0$1@bob.news.rcn.net>
Source record: 181929

What would be a small but decent dual or even tri band antenna for hiding in a tree? I really need one that is easy to get up in a tree and that is easily hidden (ie nothing really big). What do you recommend and have used in the past for stuff like this? I have antenna restrictions and have heard many recommendations from hams on the air but have either forgotten the model numbers or have not been able to find the antennas they are talking about. Any tips? Thanks!

KG4IVT.

751. Re: House loop. Insulators required?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: TR <w7trx@mindspring.com>
Message-ID: <8nsma8$9gg$1@slb2.atl.mindspring.net>
Source record: 181930

----- Original Message -----
From: 'Doc <w5lz@oio.net>
Newsgroups: rec.radio.amateur.antenna
Sent: Monday, August 21, 2000 6:10 PM
Subject: Re: House loop. Insulators required?

> > > TR, At QRP, it ought to work.
> >
> > How about at 100 watts?
> >
>
> That ought to work okay. I don't think I'd try much
> more than that, not that I'd worry about burning the house
> down, but because of the possible RFI on stuff in the house.
> 'Doc
Doc,

I was more concerned with the safety aspects of not using insulators at 100 watts. I've already done a lot of RFI prevention in my own house due to my 6m SSB addiction. I'm not too concerned here. Unfortunately, my neighbors are a different issue:-(

Thanks again, TR
W7TRX

752. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Scott Schultz <n0iu@arrl.net>
Message-ID: <snlo5.50362$QD5.513021@news.corecomm.net>
Source record: 181931

In terms of grounding, one thing you might consider is getting a 10' piece of copper pipe 1/2 or 3/4" diameter and sweating on a whatever adapters are necessary to attach a garden hose to the end and letting the force of the water act as a drill bit of sorts. There is no reason a ground rod has to be solid since it is the outer surface or "skin effect" we are concerned with. When you are done, remove the adapters and clamp a ground strap to the pipe and voila, you have a ground!

Good Luck!

73,
de Scott N0IU

753. 2m antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "T. Sanders" <tsanders@dmrtc.net>
Message-ID: <ZXto5.204$tM2.25085@news.goodnet.com>
Source record: 181932

A relative gave me a nice little homemade quad antenna that he used on 2m.
I have a simple question: How do I mount and orient this antenna? Should I
attach it to a rotor or is it omni-directional?
It has a short "mast" attached which appears to have been attached at a
right angle to the main mast by means of a "U-bolt" clamp.
All help is appreciated.
T.

754. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A0DF54.1A2012F3@cac.net>
Source record: 182027

sideband@mindspring.com wrote:

> sideband wrote:
>
> > Arrow146 wrote:
> >
> > > >Subject: Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK
> > > >From: n8wwm@aol.com (N8wwm)
> > > >Date: Sun, Aug 20, 2000 3:14 PM
> > > >Message-id: <20000820171422.24149.00000912@ng-me1.aol.com>
> > > >
> > > >Why do I get this mental image of Nathan as resembling the character Charles
> > > >emerson Winchester III, as portrayed on MASH?
> > >
> > > I thought more like Frank, He always was trying to get
> > > someone court marshaled.
> >
> > If it's Frank, then who's his "Hot Lips"?
> >
> > ::cackle
> >
> > -SSB
>
> Phil.........

ROFL!

755. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <39A0E0D5.40A06264@cac.net>
Source record: 182028

sideband@mindspring.com wrote:

> sideband wrote:
>
> > No doubt...
> >
> > Of course, I'm not the same sideband as the one at mindspring.com...
> >
> > ::grin:: I approve of your choice of nomiker.
> >
> > 73's
> >
> > -SSB
> >
>
> Thanks
> Been with me since my commo days in the Army.

Interesting, I had mine since I was with S6, Comm Co., 11th Marines,
1stMarDiv.

73's

-SSB

756. Re: Matching coil

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39a09f0e.7376053@news.mcn.org>
Source record: 182029

For 40 meters that coil should work okay unless you are run big
watts... I was wondering if it is the 1.6:1 SWR your are concerned
about? If so why? As the match looks very good indeed.

Danny, KY6MHE

On Sun, 20 Aug 2000 21:29:43 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>Sonny wrote:
>>
>> Howdy Guys
>> I have a Valor 40m whip that has a SWR of 1:6 to 1
>> I had to wind a coil around a 2 inch piece of PVC pipe.
>> I used number 14 bare copper and wound the coil using
>> string trimmer line as a spacer and when the glue dryad
>> I remover the line for a evenly spaced coil .
>> It works ,but its sort of big .
>> Can you guys give me so better ideas on making a coil ?
>>
>> Thanks
>> 73 de ke4sll
>
>
> Try using B&W coil stock. 2-3" diameter, 2-4 long, 6 turns per
>inch.
> 'Doc

757. Re: Help Need Military Dipole SC-518 (tape measure)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Bill <b.harmon@mindspring.com>
Message-ID: <8nr1kl$p7j$1@slb2.atl.mindspring.net>
Source record: 182030

Try Nebraska Surplus.

Good Luck,
Bill
"Mark Hilliard" <cvfrayedknot@cs.com> wrote in message
news:20000820103531.13724.00000139@ng-cl1.news.cs.com...
> Last year someone on the net was selling the SC-518 multiband military
> dipole. I purchased one and need another to carry on my boat as an
> emergency spare. Does anyone know who was doing this? I have lost
> all of my records of this!
>
>
>
> Mark Hilliard, CV "Frayed Knot"
> Digital Pro 70 Nature & Nautical Galleries:
> http://www.orneveien.org/n2hhr/

758. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8nr387$1p8$1@nnrp1.deja.com>
Source record: 182031

In article <39a0bac1.120779999@news.galilei.com>,
raiar@slacc.com.nospam (Gary V. Deutschmann, Sr.) wrote:
> Alright dudes!
>
> I vote third party, when the opportunity arises, of course it usually
> steals votes from the democrats.

Actually, I believe Clinton's election proved that it took votes from the republicans... he won and entered the white house by winning less than 40 percent of the vote. And no need to speculate further what had happened if the election process on the presidential level required a runoff in that case.

>Last election I voted for the little
> guy with the big ears and all the money.

another wasted vote in this very thoroughly two-party system.

>
> However, one thing I have learned in my 53 years on this planet, when
> the Democrats are in, I have money left over to sock away, when the
> Republicans are in, I have to draw out what I socked away while the
> Democrats were in.

I see that the liberal propeganda machine has really wiped your mind too. Well, be careful when you here the piper's tunes, you may march out of the city with the rest of them.

>
> However (again) I won't give the democrats all the credit, it's the
> rich republicans who made the nice loopholes that the rest of us are
> slowly finding while the democrats are pointing them out and trying to
> close them back up.
>
> TTUL
> Gary
>
>

I won't even bother.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

759. Re: What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000821070755.26498.00000113@ng-cr1.aol.com>
Source record: 182032

>you have surely never had poison ivy onslaught!
>How do you ignore it.? Please tell me more.
>I am at the end stages of my second attack this year.

The best you can do is wash off with COLD water as soon as you can. Hot water activates the urasil (sp?).

I also have a posion ivy problem;a couple of years back I infected the back of my knee and it was interefering with the circulation in my leg. Not pleasant.

73
Chip N1IR

760. Re: Aerial for VLF/LF monitoring

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8nr3k5$2bk$1@nnrp1.deja.com>
Source record: 182033

In article <qbdvpsgg6jo8edr9nrgfh8ntotb4gbeqdt@4ax.com>,
Richard C. Ferryman <106255.1565@compuserve.com> wrote:
> Can anyone suggest an antenna that I could use to feed my spectrum
> analyser for monitoring between about 50 kHz and 200 kHz. It needs to
> roughly match the 50 ohm input and be broadband over that range. I
> had considered a large sinle turn shielded loop fed directly with coax
> (no capacitors), or a small winding on a large ferrite rod. Any
> suggestions?
> Richard.
>

Just out of curiosity, what signals are down in the 50khz to 200 khz
ranges? I need to find a listing of exactly what the radio frequency
ranges are below MF (300 khz to 3000 khz, I believe it is).

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

761. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000821071443.04079.00000319@nso-fr.aol.com>
Source record: 182034

In article <39a1897b.165605908@nntp.mindspring.com>, kk5yy@arrl.net (Gerald Schmitt) writes:

>Actually Art field strength measurements indicate that they are on a
>par with Hamsticks and Hustlers. I am VERY suspicious of owner
>reports how on earth do you expect to compare one to another
>on different vehicles and days.

I once set up a sort of test platform on 40 meters with an AC power supply, a standard mount, and a field strength meter read by another ham some distance away, who recorded the results without being able to see the antenna I was putting on. The outbacker came in dead last (probably because I didn't have a base loaded whip to try out at the time, but.....) At any rate, I did try Hustler resonators, a Webster Bandspanner, and even a Comet 4 band special. I also had a bird wattmeter and measured forward as well as reflected power. They were all relatively close with the best match for a Hustler resonator, but all calculated to be less than 1.2 to 1 SWR at 50 watts. Was it scientific, probably not, not enough samples, was it reproducible, yes it was. Oh and the FSM used was also calibrated with an attenuator to produce the same readings with the attenuation used to determine which antenna worked best. It was fun doing it, but it also shows how bored a ham can get living in an apartment and wanting to get on HF with the most efficient HF mobile signal.

>In the near future we will be comparing all of the above on the
>same platform results with be forthcoming some time this fall.
Good, but your results don't agree with most of mine, or those from the shootouts I've read about. Don't know if there will be one on the west coast this year, but I should note that for efficiency, large coils seem to work best on 75 meters and on 40 meters.

Further, I still have the report on a shootout in 1997 on 75 meters archived, here is the report pasted in:

From: bart@wb6hqk.ampr.org (Bart Rowlett)
To: w6kkt@frazmtn.com
SANTA BARBARA ANTENNA TRIALS - AUGUST 17, 1997

Here are the results from the 75 meter mobile antenna trials
held near Santa Barbara on August 17 1997. The callsigns and names
are self explainatory. The numbers, typically between 59.0 and 65.0 are
the measured field strength readings in dB. The field strength meter measured
the horizontal magnetic field component of the radiated signal at a distance
of approximatly 800 meters and accuratly represents the vertically polarized
(electric field) groundwave, which is proportional to the low angle skywave
radiation suitable for working DX. The measurements do not necessarily
reflect the performance of the antenna system for working short skip (NVIS)

but are generally a useful indicator of overall performance. In most cases, the measurements were done at 3995 kHz but we allowed the frequency to be lowered if required to achieve adequate power transfer. The power input to the antenna system was taken as the difference between forward and reflected power as measured with a Bird wattmeter anywhere the operator could provide feedline access, usually at the rig antenna connector. The forward power was typically between 40 and 50 watts and all readings have been normalized. The absolute value of the field strength measurements have no meaning whatsoever but the differences accuratly reflect antenna system differences. Note, for 75 meter mobile installations, the vehicle is a major part of the antenna system and the data reflects entire antenna system performance. In some cases, extensive bonding of body and frame members has been done to reduce losses and improve counterpoise effectiveness. Unless stated, all vehicles were legal to drive with in the state of California with the antenna systems deployed and presumably operable. When the field strength trial began at around 0800, there was a slight drizzle which tended to detune (down frequency) the open air bugcatcher coils by around 20 kHz. The earlier measurements made with the bugcatchers tended to be a couple of tenths of a dB below the later measurements and I believe that to be as a result of water on the coil and not a shift in antenna range calibration. In the past we have found the same equipment to be repeatable to within +- 0.15 dB or better. The comparisons can be expected to be accurate to +- 0.2 dB.

RESULTS

CAPACITY HATS: These antennas had capacity hats of some sort for top loading.

K7POF - BOB 64.8 (lST RUN) 65.1 (2ND RUN LATER IN THE DAY)
W6MMA - VERN 64.9
W6RCA - CECIL 64.9
N6BT - TOM 63.8 (lST RUN) 64.8 (2ND RUN) 66.0 REAR ASPECT
K6SDQ - JIM 63.2
KE6DM - BOB 63.0
K6MB - JAY 59.2

BUGCATCHER TYPE: Whip only, no top hat.

K7POF - BOB 63.2
WA6JPR - WALLY 62.3
WB6HOK - BART 61.7
K6MB - JAY 60.4
W6RCA - CECIL 58.3
W6JEO - CARL 57.7
W5GYJ - JIM 57.2
KC6MAJ - PETER 52.7
WB6ZJA - JIM 51.9

SCREWDRIVER TYPE: Various manufacturers

KE6ELQ - FRANK 64.3 DOES NOT MEET VEHICLE CODE - 20' TIP TO GROUND.
W6MMA - VERN 63.2
K6RCL - DENNIS 62.6

WA6HEY - JAKE 62.1
K7EZ - ROGER 61.9
KA6TAY - GREG 61.8

OTHER:
W6YY -SANFORD 66.7 DOES NOT MEET VEHICLE CODE - 30ft ANT, TOP OF MOTORHOME

WA6JPR - WALLY 61.1 BANDHOPPER
WA6JPR - WALLY 59.5 BANDSPANNER
WA6JPR - WALLY 58.3 STAINLESS STEEL FORTEX COIL
KK5YY - GERALD 56.4 ROOFTOP MOUNTED OUTBACKER WITH TRIPLE MAGNET MOUNT
W6RCA - CECIL 52.2 11.5' WHIP (NO COIL)

ADDITIONAL DETAILS:

CAPACITY HATS:

K7POF - CENTER-LOADED, LARGE CAPACITY HAT, WIRES TO FRONT.
W6MMA - BBS SCREWDRIVER, 5' HAT WITH 18 RADIALS, R. FRONT BUMPER.
W6RCA - HOMEBREW MID-BACK BUMPER, OVER THE VEHICLE,TOWARD FRONT.
N6BT - FORCE TWELVE PLUMBER'S DELIGHT ALL AROUND VEHICLE.
K6SDQ - CENTER-LOADED WITH 42" HAT @ 11 ABOVE COIL. LEFT REAR.
KE6DM - CENTER-LOADED MID-BACK BUMPER 17" HAT.
K6MB - LEFT, REAR MOUNT, CENTER-LOADED WITH TWO WIRES TOWARD FRONT.

BUGCATCHER:

K7POF - MASTER MOBILE, LEFT REAR, 7011 BASE, 64" WHIP.
WA6JPR - BUGCATCHER, MID-BACK BUMPER MOUNT. (NO PAPERWORK)
WB6HQK - 5.25 INCH DIA COIL ON 2.5 FOOT MAST MOUNTED ON TONNEAU COVER, 72 WHIP
K6MB - BUGCATCHER, LEFT REAR.
W6RCA - TRAILER HITCH MOUNT, 3' BASE, 6X6" COIL, 5' TOP.
W6JEO - BASE-LOADED, 2x12" COIL, 62.511 TOP, 3.5' GND TO BASE.
W5GYJ - BASE-LOADED, 8x12" COIL, 7' TOP, 3' GND TO BASE. (GLA COIL)
KC6MAJ - CENTER-LOADED, ON TRUNK, 3X5" COIL. (HUSTLER COIL)
WB6ZJA - TEXAS B.C. LEFT ABAFT CAB MOUNT, 16"-HAT 12" ABOVE COIL.

SCREWDRIVER:

W6MMA - AS ABOVE SANS HAT.
K6RCL - HIGH SIERRA 1000, CNTR-LEFT MOUNT, GMC P.U.
WA6HEY - W6AAQ ANT., REAR, LEFT MOUNT @ 43" GND TO BASE.
K7EZ - W6AAG ANT., REAR MOUNT, 36" GND TO BASE.
KA6TAY - HIGH SIERRA, CNTR REAR BUMPER MOUNT 16" GND TO BASE.

OTHER:

WA6JPR - BANDHOPPER.
WA6JPR - BANDSPANNER.
WA6JPR - STAINLESS STEEL.
KK5YY - OUTBACKER,CNTR-ROOF, MAG-MOUNT.
W6RCA - 11.5' WHIP (NO COIL) TRAILER HITCH MOUNT.

Additional Notes:

KC6MAJ and WB6ZJA apparantly had grounding problems and the results are not typical of similar installations.

These are the final results but updates may occur as additional information becomes available. If you have any additional information or errors to report, please let me know.

If you have any questions please feel free to email me: bart@wb6hqk.ampr.org

If you're on the west coast, many of those involved can often be found on 3850 kHz from 0730 to 1000 and 3995 kHz from 1700 to 1800 PDT. We would like for you to join us!

bart wb6hqk

-art clemons-

762. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a10e57.4456592@news.akorn.net>
Source record: 182035

On Sun, 20 Aug 2000 21:37:39 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>rattlehead@my-deja.com wrote:
>>
>-----clipped-----
>>
>> heh, well, not a convenient one, BUT, any solution that works is a good
>> one. somebody else mentioned this possibility; could I solve the problem
>> by just grounding the body of the switchbox itself maybe? I don't know
>> how I could arrange it such that the unused position is re-directed to
>> ground, without manually doing so each time; and in this case, I might
>> as well do as you say, and just unscrew the vertical's coax.

If the grounding the cable or the switch is having that much effect on
the antenna, I'd fix the real problem. Otherwise, you are likely
wasting a bunch of RF that could be going out from a useful place like
the antenna.

That's why slopers are often called sloppers, because they are sloppy
systems.

I assume you bring all the feedlines down the tower to ground level,
and then go into the house with the cable at ground level? And the
tower is grounded for RF?

73 Tom

763. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a10f5a.4715624@news.akorn.net>
Source record: 182036

On Sun, 20 Aug 2000 21:51:26 -0700, Jim Bo <jbollit@ix.netcom.com>
wrote:

>Can anyone model this to determine if there is anything to it??
>
>Tnx

There is no need to model it. With common mode currents, nothing flows
on the inside of the cable. The center conductor woiuld have no effect
at all in a mode where the cable is being used as an RF ground.

The RF reactance of those capacitors (as I recall they were .01 uF) is
a few ohms on 160 meters, and proportionally less on higher bands. The
capacitor would have little effect anyway, but in the spot they
connect them it has no effect at all on the system.

73 Tom

764. Re: Township problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Lumpy <lumpy@digitalcartography.com>
Message-ID: <39a11735@news.peakpeak.com>
Source record: 182037

Joe wrote about:

> ...Jennifer Lopez, Martha Stewart and Susan Lucci...

Now there's a trio of babes for just about
any man's taste..;-)

lump

765. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <HfnScgADWOo5Ew8t@ifwtech.demon.co.uk>
Source record: 182038

Peter Bertini wrote:
>I am considering hanging an inverted L

On a similar topic, has anybody tried an inverted-L with a switch at the top of the vertical section, so that the horizontal loading wire can be removed for the higher bands?

I'm looking for a method of placing a switch at the top of a 1.5-2in pole, so low weight and windload are important. Any experience of small vacuum relays in such locations, for example?

Obviously there are other solutions besides a switch, for example traps or stubs - but they can only "switch" at one frequency, so it would need several traps in series for an all-band solution (unfortunately the "lowpass" trap hasn't been invented yet).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

766. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <pPDZYIAS5Oo5EwZv@ifwtech.demon.co.uk>
Source record: 182039

Crazy George wrote:
>Group:
>The rate of dissipation of acetic acid from curing RTV is dependent on the
>cross section thickness. Thin sections, like coating a connector when left
>to cure fully, are often not corrosive. Potting something and then
>immediately putting it in a sealed box guarantees that the acid will be
>around long enough to cause major trouble. So, it is the thickness and
>exposure, and both anecdotal comments are likely correct. I have
>experienced both conditions with Dow Corning 732 over the years.

By George, I think he's got it! That's the best explanation so far, for
the two contrary types of experience.

>I also
>have found that the non acetic acid types like Dow 734 and 3140 are not as
>physically robust as the 732, and suffer mechanical damage if not protected
>by a jacket.

Dow 744 seems to be the best value in a non-acetoxy, non-slump material
(at least in a country where GE products such as Silicone II aren't
available). 744 is expensive compared with regular household silicone
rubbers, but it's harder and tougher. The downside is that 744 takes at
least 24 hours to cure - and once again, it takes longer for a larger
thickness.

Another problem is that after about a year, the unused 744 in an opened
cartridge transforms itself into an ivory goo that makes a good sealant
but never sets hard at all... still useful, but not what you thought
you'd bought.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

767. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <sq28hcbe87v99@corp.supernews.com>
Source record: 182040

"Leland C. Scott" <no-spam@junk-mail.net> wrote in message
news:spno5j5gr5j178@corp.supernews.com...

Oops, just for the record I noticed I made a typo! The dielectric constant
of air should have been equal to 1.0. The numbers calculated however are
correct.

> And for the record with an Air dielectric constant of 4 I get:

--
Leland C. Scott
KC8LDO

768. Re: Center-loaded dipole question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8nr96j$87d$1@nnrp1.deja.com>
Source record: 182041

Hi Brad,
Sure this will work.... but won't changing bands be a real pain? Unless
you are operating at the feed point I can see you lowering the antenna,
changing taps and raising it again????

Why not feed a long dipole (130+ feet) with open 'ladder' line and put
a tuner in your shack???
Even a simple 'tapped' coil tuner would make 'tuning' a lost easier
when you change bands.

Just a thought..
73
Den W2DEN _._
In article <399eb12f_2@news1.prserv.net>,
"Brad" <bdstrau@attglobal.net> wrote:
>
> Center-loaded dipole question.
>
> I want to make a homebrew center-loaded dipole, but I'm a new ham and
I'm
> not sure my idea is technically sound.
>
> My plan is to begin with a 50-ohm coax fed through an SWR meter and
into a
> 1:1 balun at the center of the dipole. From each side of the balum I
would
> connect a tapped coil. And out of the far end of each coil would be a
> length of wire to serve as the dipole radiators. Then, through
simple trial
> and error, I would adjust the taps (same on both coils) until I get a
good
> SWR reading for the desired band.
>
> Does this make sense, or am I just not getting it? Am I correct in
> believing that I need no capacitance in the antenna, only
inductance? I
> can't find this scheme in any antenna books, but base-loaded ground
planes
> appear quite often.
>
> Thanks and 73,
> -Brad (kc6tue)
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

769. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a137ce.15072286@news.akorn.net>
Source record: 182042

On Mon, 21 Aug 2000 09:17:07 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>I'm looking for a method of placing a switch at the top of a 1.5-2in
>pole, so low weight and windload are important. Any experience of small
>vacuum relays in such locations, for example?

Surplus latching vacuum relays are cheap and readily available here in
the USA.

SPST relays are available from several sources, including Allan Bond
in Marietta GA..

73 Tom

770. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a13959.15468255@news.akorn.net>
Source record: 182043

>>In the near future we will be comparing all of the above on the
>>same platform results with be forthcoming some time this fall.
>Good, but your results don't agree with most of mine, or those from the
>shootouts I've read about. Don't know if there will be one on the west coast
>this year, but I should note that for efficiency, large coils seem to work best
>on 75 meters and on 40 meters.

Actually if you look at the results in shootouts, it is the large
capacitance hats that make the most difference. The larger the hat,
the less critical coil location and type becomes.

I don't know why anyone would think an antenna with most of the
loading down low would be an efficient antenna, especially when the
antenna is used in an application where ground loss resistance is
high.

73 Tom

771. Re: Antenna ... Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39A13C8B.D4E4B97C@3n.net>
Source record: 182044

Roger Halstead wrote:
>
> Generally a covenant is in place and can be part of the deed, or attached to
> the property, such as a subdivision.
>
> If you purchase you are in effect agreeing to it.
>
> Zoning on the other had at least gives you a legal fighting chance...Up to a
> point. ....

I haven't paid any attention to this issue, having done as Roger advises in the part snipped (ie: avoid covenants) but before the 70's many properties were burdened by covenants forbidding selling to people of color, Jews, et al. These covenants were struck down by the courts which, in the process, weakened all covenants. In the late 1970s a Maryland CBr was thus able to win against his neighborhood assn in court because the judge, citing precidences striking covenants, ruled that the neighbors had to show that his antenna harmed them (eg, reduced their property values) to enforce their "no antenna" rule. Perhaps someone with the requsite legal skills (which I lack) could research this angle.
73 de KA3DWW

772. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Duane Smith <jwbest@earthlink.net>
Message-ID: <b6h2qso61oiqsl48po19l8tni4p3oarj7v@4ax.com>
Source record: 182045

On Sun, 20 Aug 2000 05:35:59 GMT, Duane Smith <jwbest@earthlink.net>
wrote:
Thanks to all who answered my reqest. Next question; will a 63 pf
cap work? I can buy that for $2 or the B'nut version for $28.

>The 40 meter capacitor on my HF6V is broken. Does Butternut
>have a web page? Anyone know the value of the capacitor? I would
>even take one off of a junked Butternut. Thanks for any help.
>
>Jim N7CLV
>jwbest@earthlink.net

773. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <39a14780.214720227@news.erols.com>
Source record: 182046

On Sun, 20 Aug 2000 23:18:58 -0700, "CW" <cmagers@sprynet.com> wrote:

>A tuner would probably not do you much good. A preselector might help but
>before buying or building one of those, put an attenuator in line. It sounds
>like you are having overload problems. Take a look at my website, there are
>a few thins there that might interest you.
>--
>CW
> KC7NOD
>Web Page http://www.cw.arjika.com
>

CW,

I've definitely identified a major source of RFI:
It's 1310 WDCT, a all Korean AM BC station. It's small,
only 5Kw I think. But it's offices are only a mile from my
house, though I haven't spotted a tower as yet. I can
definitely hear harmonics spilling over at least from
200 Khz approx. up into the 160M band. Awful!!

Andrew
KG4JBM

774. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39A148C3.64674B23@wb6hqk.ampr.org>
Source record: 182047

Hi Tom,

Donaly wrote:
>
> Bart Rowlett wrote:
> >
> (snip, snip)
>
> > Unfortunatly, the Bazooka
> > doesn't really work as intended in practical amateur implementations for
> > 75/80 m where broadbanding is most needed. The technique is integral to
> > the broadbanding schemes used in many modern systems of high complexity
> > such as multiband curtain arrays.
> >
> > bart
> > wb6hqk
>
> Hi Bart,
> this is the information I was looking for, thank you. It will
> cause much thought and experimentation. Do you have a reference for
> the broadbanding schemes mentioned above?

I think the best place to start is to find a detailed description of how a folded dipole works, especially off the center frequency. One of the better descriptions I have seen is in "Antenna Theory, Analysis and design" by Balanis, which is an upper division undergraduate level textbook. My favorite textbook on the topic is is "Fields and Waves in Communication Electronics" by Ramo, Whinnery and Van Duzer.

The ARRL publishes a paperback book titled "Antenna Impedance Matching" by Caron, which introduces the concepts of matching with combinations of stubs and lumped components. Most of the techniques are based on graphical methods utilizing the Smith Chart transmission line calculator and don't necessarily take stub dissipation losses into account. At HF frequencies, such as the 75m Bazooka, stub losses are likely to be high enough so they can not be neglected as is the usual VHF & UHF practice. A good approach to analyzing the Bazooka is to first model the antenna with a Smith Chart to get a feel for what is supposed to be happening. Then model the antenna analytically using the complete transmission line model for the stubs and see what happens.

Gotta Run....

bart
wb6hqk

>
> Tom Donaly KA6RUH

775. New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: pete4www@my-deja.com
Message-ID: <8nrj6dkbm1@nnrp1.deja.com>
Source record: 182048

Hi, I have a question about antennas. I have an ICOM IC-746 transceiver and I will be getting a combination 2/6/70cm antenna made by diamond antenna, and also the TITAN DX from GAP antenna. My question is about grounding them. I live in Las Vegas, Nevada and live on the side of a mountain so the ground is extremely hard. You could only dig down 6 inches with a shovel before you needed a pick. I have been told that I need to drive an 8 foot ground rod into the ground. Since going down that deep is practically impossible, I was wondering if 4 feet would be sufficient? Also, where do I attach the ground wire to on the antenna? Do I attach it to the tripods they are mounted on, to the mast next to the antenna, or somewhere on the antenna itself, or all three? Another question I have is where do I place the lightning arrestor in the coax line? Is it placed as close to the antenna as possible, or inside the house close to the transceiver? I have one last question. Since I will be using TWO antennas, I will be using two coax lines for both of the antennas. Both of the coax lines will be 100 feet long, BUT is it ok to have the coax lines right next to each other or does there need to be some separation between the coax lines as I mount them along side the house? I will only be using one antenna to transmit at a time, so I was thinking I could keep them next to each other, but if you don't think I should, please tell me. Thanks so much for taking the time to read this and answer my questions,

-Pete

Sent via Deja.com http://www.deja.com/
Before you buy.

776. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "R.L. Bo Thompson" <kb5cng@amsat.org>
Message-ID: <8nrkv5aca1@ionews.ionet.net>
Source record: 182049

Given that the usual tolerances are any where
from 5 to 20 percent [+/-] I'd try the 63pF and see
how far out of spec it puts you. Then adjust the
antenna itself to get back where you want to be.
With any luck you might get a cap that is on the
high side.

Also is there room to parallel the 63pF with a 5pF?
(or even a 5, 12 and 50). It increases the cost and
is more mechanically "fragile" but gets you closer
to factory spec.
Good luck
73
--
R. L. "Bo" Thompson, KB5CNG <kb5cng@amsat.org>
PGP print D96CFF1B39B7F81E71CA570C92D2 Get my PGP Key at:
http://pgpkeys.mit.edu:11371/pks/lookup?op=get&search=0xF84AF2F9
"Duane Smith" <jwbest@earthlink.net> wrote in message
news:b6h2qso61oiqsl48po19l8tni4p3oarj7v@4ax.com...
> On Sun, 20 Aug 2000 05:35:59 GMT, Duane Smith <jwbest@earthlink.net>
> wrote:
> Thanks to all who answered my reqest. Next question; will a 63 pf
> cap work? I can buy that for $2 or the B'nut version for $28.
>
> >The 40 meter capacitor on my HF6V is broken. Does Butternut
> >have a web page? Anyone know the value of the capacitor? I would
> >even take one off of a junked Butternut. Thanks for any help.
> >
> >Jim N7CLV
> >jwbest@earthlink.net
>

777. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A16C10.4329@bellsouth.net>
Source record: 182050

Pete,

I can't vouch for the ground density in your area, but here's a trick
I use here to drive ground rods. If the earth will soften up when wet,
then you can dig down a foot or so (less if too hard), and fill the hole
with water. Do this a couple times until the ground softens up enough
to drive a rod. Eight feet is the standard, but if you can't go lower,
it's better than nothing.

HTH,

Jerry
K4KWH

]pete4www@my-deja.com wrote:
> snip<
> Hi, I have a question about antennas. I have an ICOM IC-746 transceiver
> and I will be getting a combination 2/6/70cm antenna made by diamond
> antenna, and also the TITAN DX from GAP antenna. My question is about
> grounding them. I live in Las Vegas, Nevada and live on the side of a
> mountain so the ground is extremely hard. You could only dig down 6
> inches with a shovel before you needed a pick. I have been told that I
> need to drive an 8 foot ground rod into the ground. Since going down
> that deep is practically impossible, I was wondering if 4 feet would be
> sufficient?

778. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <sq2rfnbq87v29@corp.supernews.com>
Source record: 182051

In <39a14780.214720227@news.erols.com>, cathexis@erols.com (Set'em up Joe) writes:
>On Sun, 20 Aug 2000 23:18:58 -0700, "CW" <cmagers@sprynet.com> wrote:

> I've definitely identified a major source of RFI:
>It's 1310 WDCT, a all Korean AM BC station. It's small,
>only 5Kw I think. But it's offices are only a mile from my
>house, though I haven't spotted a tower as yet. I can
>definitely hear harmonics spilling over at least from
>200 Khz approx. up into the 160M band. Awful!!
>
> Andrew
> KG4JBM

As an ex-broadcast engineer with a few of these a long time ago too, I have a suggestion for you. The worst case(s) of this we ever had at WTAW-AM in College Station turned out to be from a strange source. We were plagued with this big time years ago. Turns out that the neutrals in the power line grid around the station weren't quite neutral with earth ground! What with three phase this and that .. and single phase this and that and RF everywhere close to the station site... plus a 69KV primary distribution circuit that went for miles just adjacent betweeen us'n our competitor, KORA .. Oh never mind, you get the idea!

For example, about two blocks south of the transmitter site a guy wire anchoring a utility line pole went up toward the pole beside a lower level supposedly grounded utility line. They were barely touching each other, dissimilar metals at that!

Turned out that there was a solid few volts difference between these two 'grounded' lines, and over time, not only that, but there was corrosion present at the rubbing surface as well!

We cured this one by going up and wiring an egg insulator between the two lines, so they couldn't touch each other! A whole lot of folks sighed in relief over this discovery!

As you chase this one down, remember to be kind, as you can, to all concerned. Remember that at 2KW PEP, you can also wind up in the same boat from your RF up a little higher in TV land! You may be turn out to be like a large number of us that have gone before you.

You learn that rectifiers can do lots that don't rectify the situation!

Modern BC stations really aren't stuck in there with dirty output circuits. They do have some care put into the design. This that get disjointed often happen off-premises that bring the misery.

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

779. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <8nrqtg$4je$1@ins21.netins.net>
Source record: 182052

Many of today's dual band (70cm/2m) mobile antennas claim to be two 5/8's collinear on 70cm and either a single or half-wave or 5/8 wave on 2m. Many use a simple open coil in the center between the two 5/8 sections. (Some encapsulate the coil, but same difference)

As I understand the discussion, it is being stated that these antennas DO NOT work properly in collinear fashion because the phase shift is not (and cannot be made) large enough with a coil. (I'm referring to how they are sold, not by kludging in a replacement stub or center tap) This is what I have gleaned from Roy and Tom's comments.

From Roy's earlier post, it seemed that he was saying that if you try to use a coil for the required phase shift you get reduced gain and and elevated lobe (not at horizon). As I understood it, there was still gain over a single 5/8 wave, but not at what appears to be a "useful" elevation.

If this is true, it seems that a straightforward 5/8 for 70cm would likely outperform these "collinears" at the horizon. If that is true, then many of us who have serious needs for good performance on 70cm would be better off with a separate 70cm 5/8 wave and forget about the dual band "alleged" collinears that seem to be the rule of thumb these days.

Do I have this right, or have I completely jumbled this up in sifting through all these interesting posts about the "collinear conundrum" ?

...hasan

Roy Lewallen <w7el@eznec.com> wrote in message
news:399ADB8B.7641E211@eznec.com...
> It sounds to me like two different things are being compared here. The
> currents at the two terminals of a capacitor are in phase. The currents
> at the two terminals of an inductor are in phase. Neither will produce a
> phase shift in the current from input to output. No two-terminal device
> (of zero length) can -- it violates Kirchoff's law.
>

780. House loop. Insulators required?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: TR <w7trx@mindspring.com>
Message-ID: <8nrra2$1j6$1@nntp9.atl.mindspring.net>
Source record: 182053

Greetings,

I am in the planning stages of installing a stealth loop around the perimeter of my house, under the eaves. The house has cedar siding. I plan to operate mostly QRP, but want the installation to be capable of handling 100 watts as needed. I plan to use insulated wire, closely matching the color of the house. The wire is stranded 12 awg rated for in-house AC wiring. I live near Seattle, so rain may be a factor.

I would like to staple the antenna directly to the house for maximum stealth and ease of installation. The front and rear of the house are the longest runs and are under the eaves. This allows me to staple to the 2x4s under the eaves (approx. every 18"), leaving the antenna dry and mostly suspended in the air. I would like to use a Telco type stapler, using rounded staples to attach the wire to the studs. The ends of the house have no overhang, but are generally less visible. I could probably use some sort of stand-off insulator to keep the wire off the cedar siding.

As I read about stealth antennas, some folks seem to run any sort of antenna, any place, without concern for insulators. Others recommend a 6" stand-off insulator from the house. I'm confused.

For my antenna setup, are stand-off insulators necessary for proper operation or safety?

If stand-off insulators are a good idea, what is the minimum recommended distance from the house?

Does anyone know of a source of stand-off insulator that can be directly screwed into wood? The traditional amateur radio type insulators don't lend themselves well to this application. I cannot find anything suitable from hardware or building stores either. Not sure if electric fence insulators could be adapted.

To maximize stealth, can insulators be painted? I'm guessing this will affect the insulation properties, but for my use, is this a concern?

Thanks to all for your expertise.

73, TR
W7TRX

781. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A172A0.11D7958@eznec.com>
Source record: 182054

Hasan,

I agree, but with one modification. As Tom Bruhns has pointed out, the coils on some commerical collinears, such as cell phone antennas, are pretty long. These would be subject to coupling to the antenna elements, and the current at one end wouldn't necessarily be equal to the current at the other, as in the idealized zero-size circuits I modeled. So it's possible that the commercial collinears do work as advertised. At least, my modeling shouldn't be extended to conclude that they can't.

Roy Lewallen, W7EL

hasan schiers wrote:
>
> Many of today's dual band (70cm/2m) mobile antennas claim to be two 5/8's
> collinear on 70cm and either a single or half-wave or 5/8 wave on 2m. Many
> use a simple open coil in the center between the two 5/8 sections. (Some
> encapsulate the coil, but same difference)
>
> As I understand the discussion, it is being stated that these antennas DO
> NOT work properly in collinear fashion because the phase shift is not (and
> cannot be made) large enough with a coil. (I'm referring to how they are
> sold, not by kludging in a replacement stub or center tap) This is what I
> have gleaned from Roy and Tom's comments.
>
> From Roy's earlier post, it seemed that he was saying that if you try to use
> a coil for the required phase shift you get reduced gain and and elevated
> lobe (not at horizon). As I understood it, there was still gain over a
> single 5/8 wave, but not at what appears to be a "useful" elevation.
>
> If this is true, it seems that a straightforward 5/8 for 70cm would likely
> outperform these "collinears" at the horizon. If that is true, then many of
> us who have serious needs for good performance on 70cm would be better off
> with a separate 70cm 5/8 wave and forget about the dual band "alleged"
> collinears that seem to be the rule of thumb these days.
>
> Do I have this right, or have I completely jumbled this up in sifting
> through all these interesting posts about the "collinear conundrum" ?
>
> ...hasan
>
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:399ADB8B.7641E211@eznec.com...
> > It sounds to me like two different things are being compared here. The
> > currents at the two terminals of a capacitor are in phase. The currents

> > at the two terminals of an inductor are in phase. Neither will produce a
> > phase shift in the current from input to output. No two-terminal device
> > (of zero length) can -- it violates Kirchoff's law.
> >

782. Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A17869.4CA69F12@att.net>
Source record: 182055

I have recently run across the Matlab program (student edition) at what appears to be a very good price - $30.

From the description, it is very similar to the Mathcad program which I have seen mentioned in postings on this NG. It is limited in matix size to a maximum of 32x32 but otherwise is fully functional as to graphing, equation solving, etc.

Does anyone have any knowledge of or experience with Matlab that they would care to share?

At $30, it is worth looking at, I know - just curious if anyone knows of it.

--
72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

783. Re: Township problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <8nrt5obni1@slb6.atl.mindspring.net>
Source record: 182056

>>Hamptons A-listers and celebrity gawkers take heart: Rap mogul Sean
(Puffy)
>>Combs' Labor Day party will take place after all.
>>"The town board has folded even though he's had violations and he's been a
>>most inconsiderate neighbor,"

Hmmm ....maybe I will build a *temporary* wire directional like
many that night.
Since this character will be blasting 2000 watts Rap and Salsa music till
8:AM through old HI Z turntables and *very long* speaker wire
It would be great to invite some old hams in the area over with the big BIG
tube gear to add to the fun.
Off to look for eggs and poles...............:) :) :) :)

Joe wrote in message <8npv9fulh1@slb6.atl.mindspring.net>...
>These dirtballs are still breaking my chops about a 60 ft SWL diplole but
>will let this scu**bag do this again ! I WONDER HOW MUCH WAS THE BRIBE
THIS YEAR
>http://www.newsday.com/coverage/current/news/sunday/nd2799.htm
>
>Board OKs Puffy's Annual Bash
>by Seth Stern
>Staff Writer
>
>Hamptons A-listers and celebrity gawkers take heart: Rap mogul Sean (Puffy)
>Combs' Labor Day party will take place after all.
>
>The East Hampton town board reversed itself Thursday night and approved a
>permit request for Combs' annual bash that last year featured live salsa
>music, a Mr. Softee ice cream truck and a "Who's Who" of the Hamptons.
>
>Town Board member Diana Weir, whose vote in the 3-2 decision tipped the
>scale in Combs' favor, said she changed her mind when Combs' attorney moved
>up the close of the festivities from 1 a.m. to 10 p.m. The board initially
>rejected Combs' application at a meeting Tuesday night. "He made an
>accommodation, and I figured we'll give him this chance," Weir said Friday.
>"If he violates it, I doubt he'll get any more permits." Town regulations
>mandate board approval for gatherings of 250 or more, said Town Supervisor
>Jay Schneiderman.
>
>In past years, neighbors complained that guests such as Jennifer Lopez,
>Martha Stewart and Susan Lucci, along with hordes of their fans who linger
>outside, clog local roads and stay noisy late into the night.
>
>Combs' next-door neighbor Debra Lobel, who said party preparations make it

>difficult to sleep for days and interfere with her own anniversary
>celebrations, criticized the decision.
>
>"The town board has folded even though he's had violations and he's been a
>most inconsiderate neighbor," Lobel said. "They are bending over backwards
>to give the celebrity what he wants to the detriment of the quiet enjoyment
>of the neighbors." Combs paid a $2,000 fine following his 1999 July 4
>weekend party when festivities continued past the original 10 p.m. ending
>time.
>
>Combs' attorney, Stuyvesant Wainwright IV, said his client wanted to "be
>reasonable and keep the disturbance to his neighbors to a minimum." Last
>year, the board also initially rejected his application for the Labor Day
>weekend party, but reversed itself after he made concessions.
>
>
>

784. Re: Township problems, SOLVED

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <8nrtb5$b0e$1@slb1.atl.mindspring.net>
Source record: 182057

Thanks Gary I checked it out, Yep it true and in effect here !
Looks like this case is solved !

Gary V. Deutschmann, Sr. wrote in message
<39a0bbf4.121087284@news.galilei.com>...
>Hi Joe
>
>There may be a loophole, we found one here!
>
>I used to have a fairly nice tower, when it came down, I couldn't put
>up another, but I do have a push-pole, however, it is NOT set in
>concrete.
>
>Reason being, there was a little loophole that allows certain
>temporary installations. In this case, temporary meaning not
>permanently affixed. This little loophole has allowed several
>homeowners to install small storage sheds without slabs, provided it
>met with the mounting requirements for a temporary installation, which
>was simply four 2 foot auger type ground anchors. They never defined
>a length of time for a temporary installation.
>I got my push-pole up under a clause that allows for a temporary
>supporting structure for utilities or communications wires. It
>clearly defined three types of mounts, the one that I fall under was
>temporary utility and communications poles, which gave installation
>parameters for regular round utility poles, 4x4 wooden posts and
>pipes. I installed the pipe (push-pole) as a temporary communications
>support, following the definitions to the letter. I also keep some
>construction project going on at all times (meaning there is a hole
>between the living room and garage this year), plus an unfinished
>driveway that the city is hounding me about finishing.
>
>Where there's a will theirs relatives, I mean there's a way.
>
>TTUL
>Gary
>
>

785. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <39A17BEC.A7E59C8C@earthlink.net>
Source record: 182058

N8wwm wrote:
>
> I think Nathan needs a life.
>
> His PHD<pilin' it higher and deeper> is a bit weak on the reality side.

Not really. How many Ph.D.s have you met?

Phil

786. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8nru7c$24t$1@news1.alltel.net>
Source record: 182059

My dictionary says Veracity means truthfulness. Fracky is right very often, however he is in this case. At least to the meaning of the word. I can't vouch for his veracity, his mendacity perhaps!

"sideband" <sideband@cac.net> wrote in message news:399F61D8.995ECAF2@cac.net...
> Fractenna wrote:
>
> > >Salut,
> > >
> > >It is very unlikely for a company to make such a statement out of the
> > >cold.
> > >
> > >The truth is Doctor Fractenna upsetted several major companies,
> > >pretending they were going to use Freactennas on a large scale.
> > >
> > >
> > >--
> > >Gilbert.
> > >
> > Nonetheless, it is the truth; I stake my career on its veracity.
> >
> > NC
>
> Hrm... Veracity? Don't you mean validity? Veracity doesn't mean truth, it
> has a wholly different meaning... I guess such an educated man as a PhD
> (Piled Higher and Deeper?) would know something of this sort.
>
> Just my two cents.
>
> -SSB
>
>

787. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <39A17CB7.92BDB21A@earthlink.net>
Source record: 182060

rattlehead@my-deja.com wrote:
>
> I just recently re-tuned by 75 meter quarter wave sloper to work on a
> higher part of 75 meters (from about 3675 to about 3900). I did this
> with the aid of an MFJ antenna analyzer. Everything went fine with the
> usual "tune, cut and shorten the antenna, and retune" recipie. Then I
> hooked the coax back into my 2-position antenna switch box and all was
> working well.
>
> then I plugged up my other HF antenna (a half wave 10 meter vertical)
> back into the other position of the antenna swtchbox, and this action
> alone made the resonant frequency of my sloper drop by about 90 to 100
> kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax
> out of the 2-pos switch box, the resonant frequency of the sloper climbs
> back from 3810 back up to 3900.
>

Assuming the switch is OK, most do not disconnect the ground side. So
the problem maybe that the other antenna is hanging, in effect, off the
gound side of your sloper .. a situation that you change when you
unscrew the connector.

Phil

788. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000821151518.04079.00000349@nso-fr.aol.com>
Source record: 182061

In article <39a13959.15468255@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI) writes:

>Actually if you look at the results in shootouts, it is the large
>capacitance hats that make the most difference. The larger the hat,
>the less critical coil location and type becomes.

But Tom, the difference between the best whip and the best Capacity hat is only one to two dB. Yes, the difference is reproducible, but I'ld bet that putting a capacity hat sufficiently spaced above a one inch diameter wouldn't make the one inch center fed coil better than someone with a 5 inch diameter coil & whip(once again center fed). One day, someone is going to have to find a single site with perhaps an abandoned car with a properly designed mount and quick disconnect setup and try every available combination repeatedly. I do note that two to 2 1/2 inch diameter coils seem to be the breakoff point for a somewhat efficient mobile antenna on 75 meters and 40 meters.

Of course, if you've played with the things and the one inch will work well in your testing, I'll take your word over my guessing, but I did try a capacity hat over a Hustler Resonator, and note that I had to use a 30 meter coil to be able to get something a rig would feed into on 40 meters with a capacity hat. I also note that Hustler resonators aren't strong enough to take a large hat while in motion, and that they are close wound, rather than spaced like many better performing coils.
-art clemons-

789. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000821164450.23100.00000352@ng-cu1.aol.com>
Source record: 182062

I wonder if depth helps all that much in arid soil. If you can only get down a foot or so, you might opt for a "mat" approach to spread things out over a large surface area (lotsa little rods connected in a star pattern or just a good radial system).

I live on a dry sandpile where it's real easy to drive a rod 6-8 feet (as long as you miss the rocks). But, instead of a ground rod at the station, I use a ground mat consisting of 12 1/2-wave radials under the antenna coupled (loosely) to a 125-foot well casing at the center. So far, no direct hits or blown pumps, but I feel like it keeps the action away from the house better than a 8-foot rod in the sand next to the radio. It also reduces ground-losses in the antenna and helps my signal.

Rick K1BQT

790. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Siggy <reashore@home.com>
Message-ID: <Cyho5.15212$i5.539430@news1.rdc2.on.home.com>
Source record: 182063

I would suggest plugging in the radio on a different electrical circuit as well as installing some good line filters.

Siggy

"Juan" <jherrero@videotron.ca> wrote in message news:39a19265.342802381@news.videotron.ca...
> Hi
> I have an small astronomical observatory 100Km North of Ottawa. In
> order to measure asteroid occultations, reduce orbits and time other
> astronomical events. I need to receive the UTC time signal. To that
> end. I purchased a Grundig YB400PE radio. With it. I can best receive
> channels CHU at 3330 and 7335. With transmitter located at about 110Km
> South of the observatory.
> Here is the problem. When I engage the telescope control drive. The
> 24V pulse modulated stepper motors create an electronic clatter that
> completely overrides the UTC signal. So I've been thinking of running
> a coaxial wire to an antenna away from the observatory. When I started
> to investigate the subject in the net. It quickly became apparent that
> antenna design is a complex mater. Thus I wonder If some of you
> experts could provide a simple antenna design to solve this
> astronomer's noisy problem. Please note that although I have a decent
> knowledge of electronics. I am a complete neophyte when it comes to
> antennas.
> Note: I have lots of trees around to use as mast if needed.
>
>
> Thanks in advance.
> Juan Herrero
> Astronomy In The Great White North
> http://pages.infinit.net/jherrero/

791. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Siggy <reashore@home.com>
Message-ID: <JBho5.15213$i5.539726@news1.rdc2.on.home.com>
Source record: 182064

An old Army Signaller trick is to get it as deep as possible and wet down
the are with a jerry can of water for conductivity.....then, if in
location for awhile.....urinate on the ground spike...
and just pray there are no lighting strikes while your doing your thing.

Siggy

<pete4www@my-deja.com> wrote in message news:8nrj6dkbm1@nnrp1.deja.com...
> Hi, I have a question about antennas. I have an ICOM IC-746 transceiver
> and I will be getting a combination 2/6/70cm antenna made by diamond
> antenna, and also the TITAN DX from GAP antenna. My question is about
> grounding them. I live in Las Vegas, Nevada and live on the side of a
> mountain so the ground is extremely hard. You could only dig down 6
> inches with a shovel before you needed a pick. I have been told that I
> need to drive an 8 foot ground rod into the ground. Since going down
> that deep is practically impossible, I was wondering if 4 feet would be
> sufficient? Also, where do I attach the ground wire to on the antenna?
> Do I attach it to the tripods they are mounted on, to the mast next to
> the antenna, or somewhere on the antenna itself, or all three? Another
> question I have is where do I place the lightning arrestor in the coax
> line? Is it placed as close to the antenna as possible, or inside the
> house close to the transceiver? I have one last question. Since I will
> be using TWO antennas, I will be using two coax lines for both of the
> antennas. Both of the coax lines will be 100 feet long, BUT is it ok to
> have the coax lines right next to each other or does there need to be
> some separation between the coax lines as I mount them along side the
> house? I will only be using one antenna to transmit at a time, so I was
> thinking I could keep them next to each other, but if you don't think I
> should, please tell me. Thanks so much for taking the time to read this
> and answer my questions,
>
> -Pete
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

792. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8nsan8$epb@nnrp1.farm.idt.net>
Source record: 182065

Matlab is primarily aimed at matrix operations, and system simulations. Many people use it for doing DSP design work.

For my money I would try to get my hands on the student edition of Mathcad 2000 Pro. It comes with the DSP function pack, wavelet function pack, a 2D CAD drawing program, etc. The student version is EXACTLY the same as the retail Mathcad 2000 Pro version with NO program limitations, I E-mailed Mathsoft who verified this. At $100 USD it is a better deal than Matlab. Since it comes with the above function packs for free (student version), which if you had to buy the software out right, would cost over $1700 !! As a Ham Radio license holder I think Mathsoft considers this an educational use, so you may be able to order it from them direct. If not then pay a visit to your local university book store. If you do get it don't forget to stop by the Mathsoft web site to down load the most current patch file for it, which I think is version 2a currently.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

"George , W5YR" <w5yr@att.net> wrote in message
news:39A17869.4CA69F12@att.net...
> I have recently run across the Matlab program (student edition) at what
> appears to be a very good price - $30.
>
> From the description, it is very similar to the Mathcad program which I
> have seen mentioned in postings on this NG. It is limited in matix size
> to a maximum of 32x32 but otherwise is fully functional as to graphing,
> equation solving, etc.
>
> Does anyone have any knowledge of or experience with Matlab that they
> would care to share?
>

> At $30, it is worth looking at, I know - just curious if anyone knows of
> it.
>
> --
> 72/73, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 54th year and it just keeps getting better!
> R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
> (12/99)

793. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <5JZO$EAn9ao5EwbR@g3ohx.demon.co.uk>
Source record: 182066
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <TIpn5LAFI5n5Ew38@ifwtech.demon.co.uk>, Ian White, G3SEK
<G3SEK@ifwtech.com> writes
>Dennis Ferguson wrote:
>>Since the DSP is doing the last stage of IF filtering itself it will
>>hence also need to drive the S meter itself based on knowledge of the gain
>>it is applying to the analog stages plus the measured (digital) signal
>>strength after the final filtering is done. Since it inherently needs
>>to know all of this with reasonable precision anyway, an accurate S meter
>>(calibrated to whatever S-unit standard the manufacturer chooses) seems
>>to sort of automatically fall out.
>>
>
> ...and yet it doesn't seem to help.
>
>These are the results for the new IC-756PRO, taken from an RSGB lab
>review (values below S9 are averages of measurements taken every 2 S-
>points):
>
>S1-S3 1.9dB
>S3-S5 2.6dB
>S5-S7 2.5dB
>S7-S9 2.4dB
>S9 - S9+20 13.0dB
>+20 - +40 22.1dB
>+40 - +60 17.9dB
>
>Don't take the figures behind the decimal point too seriously, but the
>message is clear enough. Whatever the other merits of the IC-756PRO
>receiver, the S-meter is hopeless as a means of measuring anything. But
>it does have a "lively" S-meter, so that's OK.
>
>Tracking this problem through previous generations of Japanese rigs,
>there was a brief time when the difference between S9 and S9+20 was
>actually pretty close to 20dB. Now it seems even that has gone.
>
>This is a lost cause - it's time to shrug our shoulders and get over it.
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

I have a 'Fidelity 2000' CB radio (CB/81). Bought it at a village jumble
sale in 1984 for ï¿½15, and did the 'Bury Amateur Radio Society' mod to

convert it for 10m FM. It has the Cybernet board. Brilliant S-meter. 6dB = one S-point, S1 to S9. How do they do it? Don't know. Has AGC, which may help with 'logging' the voltage-to-meter deflection.

In comparison, my 2m Yaesu FT480 S-meter ('gooseberries, cherries, and oranges') is absolutely total rubbish.

Ian.

794. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39A1B1F2.A6B859B5@uci.edu>
Source record: 182067

> Fractenna wrote:
> I am here to enjoy myself and provide accurate and cogent info. As long as I am
> capable of this, I am happy to be here.

If you were capable of only providing accurate and cogent info, and none
of the rest, everyone else would be happy you were here too.

ac6xg

795. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A1B819.1A8ECF24@oio.net>
Source record: 182068

pete4www,
If the ground is that hard, you might think about laying
out radials instead of a ground rod. The more metal you put
down, the better the ground. If it's close, you might also
consider using the 'house' ground rod. If a ground rod is
not into the water table, it really isn't doing you any good.
Running the feed lines together shouldn't do any harm at
all. The lightning arrestor should be at the base of the
antennas, or at least outside the house. Depending on the
type of arrestor you have, you may be wasting your time.
Most common lightning arrestors are worthless, they don't
act fast enough. If it's a 'spark gap' type, throw it away.
'Doc

796. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:26:05 UTC
From: arrow146@aol.com
Message-ID: <20000820202605.25529.00000370@ng-cb1.aol.com>
Source record: 182109

>Subject: Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK
>From: n8wwm@aol.com (N8wwm)
>Date: Sun, Aug 20, 2000 3:14 PM
>Message-id: <20000820171422.24149.00000912@ng-me1.aol.com>
>
>Why do I get this mental image of Nathan as resembling the character Charles
>emerson Winchester III, as portrayed on MASH?

I thought more like Frank, He always was trying to get
someone court marshaled.

797. Re: Special Victim Alert

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:44:26 UTC
From: k1bqt@aol.com
Message-ID: <20000820204426.15265.00000434@ng-cd1.aol.com>
Source record: 182110

>Well, I for one welcome anyone "special" to try something... They may find I'm
>really not worth the effort. ::grin::

Me either!

Rick

798. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 00:55:20 UTC
From: 2w8ji@contesting.com
Message-ID: <39a07c5a.1023003@news.akorn.net>
Source record: 182111
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Sun, 20 Aug 2000 12:34:59 -0400, "Tom Wagner - N1MM"
<tomwagner@mindspring.com> wrote:

>Just so I'm sure I have it right, 100% weight is no time off
>and 0% weight is no time on. At 33% weight, the dots would
>be separated by an off period twice as long as the on period.
>
>I.e. weight = dot length / (dot length + space between dots length)
>
>73,
>Tom

I think you have it. Dot rate is constant. But the dots and dashes
extend (but keep the same ratio between each other to fill in the
spaces).

So the CW gets "heavier" and lighter with weight...hmmm...that must be
why we call it weight instead of ratio.

73 Tom

799. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 01:02:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39a07dda.1407456@news.akorn.net>
Source record: 182112

On Sun, 20 Aug 2000 17:16:20 -0500, 'Doc <w5lz@oio.net> wrote:

>
>
>rattlehead,
> For what it's worth, it sounds like the problem is in the
>antenna switch. Does the switch ground the unused position?
>If it does, can you 'unground' or 'unshort' the vertical when
>you switch out of it's position? If the switch doesn't
>short or ground the unused positions, try grounding them.
> If that doesn't help, well... don't connect the vert.
> 'Doc
>PS - Not a very good solution, huh?

Hey Doc, read the opening thread again.

1.) He has a sloper.

2.) Slopers depend on the tower and anything connected to the tower
for a ground.

3.) Anything that cnages the ground will detune the sloper, such as
connecting a feedline and antenna on or near the tower to the station
ground.

4.) If the switch was bad, the RFI (from no ground) or the SWR change
(from two antennas being paralleled would be great.

5.) I'd wager if he touches the shield of the Antron antenna to the
switch or any other ground in the shack, his sloper will change
frequency.

6.) Slopers are often problems like this, because the work against the
tower and anything connected to or near the tower.

73 Tom
4.)

800. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 01:04:54 UTC
From: 2w8ji@contesting.com
Message-ID: <39a07f15.1722128@news.akorn.net>
Source record: 182113

On Sun, 20 Aug 2000 12:39:02 -0700, Jim Bo <jbollit@ix.netcom.com>
wrote:

>Hello,
>
>I read many many years ago about a method of grounding a ham radio
>transmitter that is located on the second floor of a house.
>
>It involved using coax. The dc path for the ground was the center
>conductor. The "different" part of this method involved taking 0.001
>microfarad caps and connecting them at each end of the coax from the
>outer braid to the center conductor. There was no dc connection to the
>braid, but at each end the braid was connected to the center conductor
>via the 0.001 microfarad caps.
>
>This was supposed to make a better rf ground for the radio located on
>the second floor.
>
>Does this make sense? What principal is in effect that makes it "sense?
>
>Thanks in advance.

That article appeared in 73 Magazine, not QST.

It was a serious article. 73 Magazine is the source of some of the
worse possible information in the world, because they print anything
that falls on the desk.

That idea is absolute rubbish.

73 Tom

801. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 01:48:54 UTC
From: kk5yy@arrl.net
Message-ID: <39a1897b.165605908@nntp.mindspring.com>
Source record: 182114

On 20 Aug 2000 19:14:43 GMT, n8blk@aol.com (Art Clemons) wrote:

>In article <20000820062922.23914.00000347@ng-co1.aol.com>, jhulet@aol.com
>(Jason S. Hulet) writes:
>
>>Seems I have heard may negitive comments on the Outbacker HF Mobile >antennas.
>
>>Anyone out there that actually like the Outbacker for HF Mobile operation?
>>Is it really the much worst then say a Pro-am whip or Ham stick?
>
>I suggest the oubacker is a sturdy antenna, one you could probably take off
>your antenna mount, beat a pack of wild dogs to death with and then connect up
>and have approximately the same antenna performance you previously had. That
>being said, it is not a stellar HF mobile performer, its performance on 75
>meters is well below that of a screwdriver, large bugcatcher, center leaded
>whip (ala for example Hustler) or the tapered whips used by folks like
>Hamstick, Lakeview et al.

Actually Art field strength measurements indicate that they are on a
par with Hamsticks and Hustlers. I am VERY suspicious of owner
reports how on earth do you expect to compare one to another
on different vehicles and days.

In the near future we will be comparing all of the above on the
same platform results with be forthcoming some time this fall.

>
>It does have some usages. Ham truckers who regularly have to switch trucks
>might find them useful, since they can be easily moved and offer multiple HF
>band access, someone who drives a company vehicle or rents probably will find
>them of use (no holes, no worries about excessive bending of car parts). If
>you fall into either category, the Outbacker is for you, but for best
>performance on 40M & 75M, you probably want a screwdriver or BugCatcher, if
>they're too large, next in performance is a center loaded antenna, then the
>spiral loaded whips. There are of course small HF center loaded antennas like
>the Comet antennas which have a variety of performance problems which fall in
>between "normal" center loaded and spiral antennas, and finally things like the
>OutBacker, and base loaded whips. It's your choice. If appearance or size is
>very important, then perhaps the OutBacker is for you, but with a known
>performance deficit.
>
>-art clemons-

802. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 01:51:18 UTC
From: rattlehead@my-deja.com
Message-ID: <8nq1ugtjc1@nnrp1.deja.com>
Source record: 182115

In article <39A058B4.C5AAEB8D@oio.net>,
'Doc <w5lz@oio.net> wrote:
>
>
> rattlehead,
> For what it's worth, it sounds like the problem is in the
> antenna switch. Does the switch ground the unused position?
> If it does, can you 'unground' or 'unshort' the vertical when
> you switch out of it's position? If the switch doesn't
> short or ground the unused positions, try grounding them.
> If that doesn't help, well... don't connect the vert.
> 'Doc
> PS - Not a very good solution, huh?
>

heh, well, not a convenient one, BUT, any solution that works is a good one. somebody else mentioned this possibility; could I solve the problem by just grounding the body of the switchbox itself maybe? I don't know how I could arrange it such that the unused position is re-directed to ground, without manually doing so each time; and in this case, I might as well do as you say, and just unscrew the vertical's coax.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

803. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 02:02:53 UTC
From: rattlehead@my-deja.com
Message-ID: <8nq2k4ufc1@nnrp1.deja.com>
Source record: 182116

In article <39A084A2.F24C76CB@qth.com>,
Murray Neece <RadioRanch@qth.com> wrote:
> This is a multi-part message in MIME format.
> --------------59FE6383E6698C14AF2FEA43
> Content-Type: text/plain; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
> Your antron is becoming a tuning wand to the sloper....you will have
to
> reposition one or the other...73 Murray
>

I take it this is one of the aspects of a sloper... I take it that
inverted V's aren't so sensitive to other cables, wires, etc. nearby?
just curious....
--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

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Before you buy.

804. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 02:05:29 UTC
From: rattlehead@my-deja.com
Message-ID: <8nq2ovuof1@nnrp1.deja.com>
Source record: 182117

In article <39a00230.25518585@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> On Sun, 20 Aug 2000 15:08:22 GMT, rattlehead@my-deja.com wrote:
>
> >one friend suggested that maybe my sloper isn't grounded well enough
> >(the tower/pole a slower is mounted to is suppose to act, itself, as
> >the counterpoise of the antenna). I would like the thoughts of
everybody
> >else out there.
>
> Your friend is correct. Sloppers depend heavily on the tower as
> something to "push against". The tower forms the other leg of a
> dipole, and has just as much currenty in it as the slopper does,
> assuming you don't have current flowing down other wires.
>
> When you connect the shield of the other cable, you are changing the
> path length to ground. Fixing this problem can be a real pain. You'd
> need to bring all the cables down to ground and ground them securely
> to a good ground before heading into the house with them. You might
> also get away with choke baluns on all the other cables.
>
> Sloppers really are mostly "blind luck" antennas. If your system
> happens to work out to present a low impedance on the tower at the
> mounting poiint of the slopper, they work OK. If not, you are
> "screwed".
>
> 73 Tom
>

So, how could I accomplish this? bring the coaxes all the way down the
tower to the bottom, literally, and then connect the braided shield of
the coax to a ground rod at that point via a wire? I already have a
ground rod there at that point, the the coaxes already come down to the
ground before running into the house... so this would be a simple and
quick solution.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

805. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 03:57:58 UTC
From: Pete <Pete@xyz.com>
Message-ID: <aN1o5.12272$ZI2.617738@news1.rdc1.il.home.com>
Source record: 182019

I have an Outbacker and I like it very much. I have it installed on a 3 magnet mount which I use in the middle of the roof on my minivan and on my truck. I have no trouble working 20, 40 ,and 75. One thing I like about it is that I don't have to worry catching it on tree limbs and bridges. I keep the banana clip and sockets clean and I use silicon grease on them. The only gripe I had about the antenna is that it costs too darn much.

"Gerald Schmitt" <kk5yy@arrl.net> wrote in message news:39a1897b.165605908@nntp.mindspring.com...
> On 20 Aug 2000 19:14:43 GMT, n8blk@aol.com (Art Clemons) wrote:
>
> >In article <20000820062922.23914.00000347@ng-co1.aol.com>, jhulet@aol.com
> >(Jason S. Hulet) writes:
> >
> >>Seems I have heard may negitive comments on the Outbacker HF Mobile
>antennas.
> >
> >>Anyone out there that actually like the Outbacker for HF Mobile
operation?
> >>Is it really the much worst then say a Pro-am whip or Ham stick?
> >
> >I suggest the oubacker is a sturdy antenna, one you could probably take
off
> >your antenna mount, beat a pack of wild dogs to death with and then
connect up
> >and have approximately the same antenna performance you previously had.
That
> >being said, it is not a stellar HF mobile performer, its performance on
75
> >meters is well below that of a screwdriver, large bugcatcher, center
leaded
> >whip (ala for example Hustler) or the tapered whips used by folks like
> >Hamstick, Lakeview et al.
>
> Actually Art field strength measurements indicate that they are on a
> par with Hamsticks and Hustlers. I am VERY suspicious of owner
> reports how on earth do you expect to compare one to another
> on different vehicles and days.
>
> In the near future we will be comparing all of the above on the
> same platform results with be forthcoming some time this fall.
>
>
> >

> >It does have some usages. Ham truckers who regularly have to switch
trucks
> >might find them useful, since they can be easily moved and offer multiple
HF
> >band access, someone who drives a company vehicle or rents probably will
find
> >them of use (no holes, no worries about excessive bending of car parts).
If
> >you fall into either category, the Outbacker is for you, but for best
> >performance on 40M & 75M, you probably want a screwdriver or BugCatcher,
if
> >they're too large, next in performance is a center loaded antenna, then
the
> >spiral loaded whips. There are of course small HF center loaded antennas
like
> >the Comet antennas which have a variety of performance problems which
fall in
> >between "normal" center loaded and spiral antennas, and finally things
like the
> >OutBacker, and base loaded whips. It's your choice. If appearance or
size is
> >very important, then perhaps the OutBacker is for you, but with a known
> >performance deficit.
> >
> >-art clemons-
>

806. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:06:47 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a0b72f.119866329@news.galilei.com>
Source record: 182020
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi Tom

>Ohm's law is fine. You have just not paid attention to what antenna
>was described.
>
>In a small loop, current can be hundreds of amperes with 100 watts.

Perhaps not! Apparently they are talking about what I would call an
"Army Loop" antenna or a "Hart Loop" antenna.
When I think of "Small Transmitting Loop Antenna's" for example 2 to
17 MHz, I visualize a 20 foot diameter loop, possibly as small as 14
feet in diameter for 7 to 14 MHz.

Sorry for the confusion!

TTUL
Gary

807. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:12:44 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a0b952.120413789@news.galilei.com>
Source record: 182021
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Hi Ian

Agreed!

Also, if you have any ideas, I'm game, tired of paying shrinks for nothing, or should I say, no progress.

I'm glad you recovered from your fall, sorry to hear you were injured. My fall was broken a couple of times on the way down which decreased the acceleration factor I presume. I can't really say what I felt for sure, I didn't wake up right away, but apparently I hit flat based on the bruises on my backside, which might be what saved my dumb ^$$.

TTUL
Gary

808. Re: vote republican, save your butt

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:18:28 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a0bac1.120779999@news.galilei.com>
Source record: 182022

Alright dudes!

I vote third party, when the opportunity arises, of course it usually steals votes from the democrats. Last election I voted for the little guy with the big ears and all the money.

However, one thing I have learned in my 53 years on this planet, when the Democrats are in, I have money left over to sock away, when the Republicans are in, I have to draw out what I socked away while the Democrats were in.

However (again) I won't give the democrats all the credit, it's the rich republicans who made the nice loopholes that the rest of us are slowly finding while the democrats are pointing them out and trying to close them back up.

TTUL
Gary

809. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:30:30 UTC
From: sideband@mindspring.com
Message-ID: <39A0BE76.E715344A@mindspring.com>
Source record: 182024

sideband wrote:

> No doubt...
>
> Of course, I'm not the same sideband as the one at mindspring.com...
>
> ::grin:: I approve of your choice of nomiker.
>
> 73's
>
> -SSB
>

Thanks
Been with me since my commo days in the Army.

810. Re: Township problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:31:03 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a0bbf4.121087284@news.galilei.com>
Source record: 182023

Hi Joe

There may be a loophole, we found one here!

I used to have a fairly nice tower, when it came down, I couldn't put up another, but I do have a push-pole, however, it is NOT set in concrete.

Reason being, there was a little loophole that allows certain temporary installations. In this case, temporary meaning not permanently affixed. This little loophole has allowed several homeowners to install small storage sheds without slabs, provided it met with the mounting requirements for a temporary installation, which was simply four 2 foot auger type ground anchors. They never defined a length of time for a temporary installation.
I got my push-pole up under a clause that allows for a temporary supporting structure for utilities or communications wires. It clearly defined three types of mounts, the one that I fall under was temporary utility and communications poles, which gave installation parameters for regular round utility poles, 4x4 wooden posts and pipes. I installed the pipe (push-pole) as a temporary communications support, following the definitions to the letter. I also keep some construction project going on at all times (meaning there is a hole between the living room and garage this year), plus an unfinished driveway that the city is hounding me about finishing.

Where there's a will theirs relatives, I mean there's a way.

TTUL
Gary

811. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:34:19 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a0bf11.121884169@news.galilei.com>
Source record: 182025

Hi Juan

It might be cheaper and easier to shield your stepper motors or place filters in or around the pulse lines.

The guru's here should be able to help you with that one.

TTUL
Gary

812. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 05:42:05 UTC
From: sideband@mindspring.com
Message-ID: <39A0C12D.2F07B30D@mindspring.com>
Source record: 182026

sideband wrote:

> Arrow146 wrote:
>
> > >Subject: Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK
> > >From: n8wwm@aol.com (N8wwm)
> > >Date: Sun, Aug 20, 2000 3:14 PM
> > >Message-id: <20000820171422.24149.00000912@ng-me1.aol.com>
> > >
> > >Why do I get this mental image of Nathan as resembling the character Charles
> > >emerson Winchester III, as portrayed on MASH?
> >
> > I thought more like Frank, He always was trying to get
> > someone court marshaled.
>
> If it's Frank, then who's his "Hot Lips"?
>
> ::cackle
>
> -SSB

Phil.....

813. Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-21 20:40:12 UTC
From: jherrero@videotron.ca
Message-ID: <39a19265.342802381@news.videotron.ca>
Source record: 182108

Hi
I have an small astronomical observatory 100Km North of Ottawa. In order to measure asteroid occultations, reduce orbits and time other astronomical events. I need to receive the UTC time signal. To that end. I purchased a Grundig YB400PE radio. With it. I can best receive channels CHU at 3330 and 7335. With transmitter located at about 110Km South of the observatory.
Here is the problem. When I engage the telescope control drive. The 24V pulse modulated stepper motors create an electronic clatter that completely overrides the UTC signal. So I've been thinking of running a coaxial wire to an antenna away from the observatory. When I started to investigate the subject in the net. It quickly became apparent that antenna design is a complex mater. Thus I wonder If some of you experts could provide a simple antenna design to solve this astronomer's noisy problem. Please note that although I have a decent knowledge of electronics. I am a complete neophyte when it comes to antennas.
Note: I have lots of trees around to use as mast if needed.

Thanks in advance.
Juan Herrero
Astronomy In The Great White North
http://pages.infinit.net/jherrero/

814. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8ntbeomkh1@nnrp1.deja.com>
Source record: 181944

I'd say that Matlab and MathCad do different, complementary things.
Matlab is very good at numberical calculations involving matrix
functions, and MathCad is good at symbolic manipulations,
presentation, and acting like a "math spreadsheet." I use both of
them; which I use at a given time depends on what I'm trying to
accomplish.

Actually, I don't use Matlab much. Instead, I use the very similar
SciLab, which is freeware. You can download it from a site in France.
It comes with some pretty decent manuals. It's not perfect, but there
are some areas that IMO it does better than Matlab.

Cheers,
Tom

In article <39A17869.4CA69F12@att.net>,
"George , W5YR" <w5yr@att.net> wrote:
> I have recently run across the Matlab program (student edition) at
what
> appears to be a very good price - $30.
>
> From the description, it is very similar to the Mathcad program which
I
> have seen mentioned in postings on this NG. It is limited in matix
size
> to a maximum of 32x32 but otherwise is fully functional as to
graphing,
> equation solving, etc.
>
> Does anyone have any knowledge of or experience with Matlab that they
> would care to share?
>
> At $30, it is worth looking at, I know - just curious if anyone knows
of
> it.
>
> --
> 72/73, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 54th year and it just keeps getting better!
> R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
> (12/99)
>

--
Tom Bruhns -- K7ITM

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815. Re: vote republican, save your butter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39A23E5F.EEC30931@mindspring.com>
Source record: 181945

No, it was about 47%. Get used to the idea, as other parties gain prominence and strength. The rest of the democratically governed world would marvel at a 47% take of the vote. We'll see Dem-Green and Rep-Reform (with the Libs split between them) Congressional parliamentary-style coalitions, or some such, within two more election cycles, I believe. Majority rule is to be feared anyway, for its potential for stifling dissent and repressing minority views and their pursuing of happiness. All tyranny begins with the approval of a majority. That's what the 'no establishment' (of religion) clause of the First Amendment is all about: keeping the majority off the backs of the minority. And "rule" by majority was certainly not the intention of *all* of the Founders, Madison among them. The reason we have the Electoral College and a Senate that is not proportional is to counterbalance the majority. I'd love to see the Electoral College done away with (as well as holding all primaries of all parties on the same day; New Hampshire doesn't vote in the *General* election 3 months before California: why do you suppose that is?), it would go along way towards making Presidential elections more equitable and "democratic." "Winner take all" is a euphemism for quashing the voice and will of regional minorities. Run-offs are held when two or more candidates are within a percent or *less* of each other, not simply when the nominal winner scores below 50%. No reason to have a run-off when Candidate A has 47% and Candidate B has 35%. As long as we are considering parliamentary-style changes to our electoral system, why not restrict election campaigns to no longer than 180 days before Election Day, instead of the current practice of 3 years 11 months. Hmmmm.

de Will KD7BFX

rattlehead@my-deja.com wrote:

>
> Actually, I believe Clinton's election proved that it took votes from
> the republicans... he won and entered the white house by winning less
> than 40 percent of the vote. And no need to speculate further what had
> happened if the election process on the presidential level required a
> runoff in that case.
>

816. Re: Buutternut H9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8nti7g$tm5$1@nnrp1.deja.com>
Source record: 181946

Pete
Bencher (B'nut) does not nake a tilt feature but GAP:
www.gapantenna.com
does that just may work.
I think there is another commercial brand around but I could not find
it.
This looks like a nice project to homebrew! I've no need to tilt my
B'nut but it would be fun tryin' to work out the mechanics.
Hope this helps
73 Den W2DEN _._

In article <mKmo5.13606$ZI2.813504@news1.rdc1.il.home.com>,
"Pete" <Pete@xyz.com> wrote:
> I am going to ground mount my antenna. The question I have is, do any
of you
> know if there is a
> tilt-over bracket I can buy for this vertical? We have restrictions
in our
> subdivision and I would like to hide the antenna when not in use.
Thanks
> for your information.
>
>

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817. Re: HyGain Hy-Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Bill <b.harmon@mindspring.com>
Message-ID: <8nth2ipje1@slb3.atl.mindspring.net>
Source record: 181947

John,
I have just recently installed a HyTower and will be happy to share
information with you. The manual has fey parts details for the small parts.
Can you be more specific about your needs?

Bill AF4WP
"KB0KSA" <kb0ksa@aol.com> wrote in message
news:20000821221527.24460.00000677@ng-ci1.aol.com...
> Hi Gang,
> Just got part of a Hy-Tower. I think its the first model. I need the
specs to
>
> make the missing parts and get the old 80m thur 10m Vert up and running.
> I'm willing to pay reasonable copy and mailing cost.
> Tnx for all your help...73s...John

818. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a246e6.3432599@news.akorn.net>
Source record: 181948

On Tue, 22 Aug 2000 04:19:09 GMT, kk5yy@arrl.net (Gerald Schmitt)
wrote:

>On 21 Aug 2000 11:14:43 GMT, n8blk@aol.com (Art Clemons) wrote:
>
>The Outbacker data you cite is an absolutely worst case scenario for
>the Outbacker and it did in fact beat a loaded CB 1/4 wave antenna.

The UNloaded 11.5 foot whip antenna it did beat was a very very poor
system.

Most good antennas were around 62 dB, and some a few dB higher. 6-10
dB down may not sound like when signals are strong, but it's a huge
difference when signals are marginal.

>You can gain a bit by grounding an Outbacker and matching the load.
>It's pretty much the same as a Hustler or Hamstick. As you can see
>from the results you just don't get there on 75 until you get a center
>mounted coil of some reasonable diameter.

A large diameter has nothing to do with it. In many cases, Q is
higher with a longer smaller diameter coil of reasonable size wire.

>The most interesting thing of the lot was the stainless steel coil
>bugcatcher. It was very much a copy of the 480 coil that Henry
>Allen makes but in stainless. Guess that makes a case for
>ohmic losses and efficiency.

Ground losses swamp out changes in loss resistance in antennas. The
larger the vehicle you put the antennas on, the more the spread in
efficiency when ESR in the antenna is minimized.

The smaller the vehicle, the more important current distribution in
the antenna becomes.

Hams that think large diameter coils offer optimum performance are
missing the boat. Even a #14 wire coil can have Q of around 300 in a
mobile, and the largest coils are lucky to reach 600. When the coil
requires a large amount of reactance, a long slender coil with smaller
wire can (and usually does) have more Q that a large diameter large
conductor inductor.

All other things equal that amounts to a very small change when ground
losses are considered. With a perfect ground that would be an
efficiency change of 2, half the loss with the larger coil. When
ground losses are thrown in, the difference is meaningless.

Moving from 100% base loading to 100% top loading will change
efficiency by a factor of four.

73 Tom

819. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ntj2muje1@nnrp1.deja.com>
Source record: 181949

Roger:
Hi, Just a comment, I have found that any attempt to 'seal' a
connection using silicone and or caulk led to problems with water
getting into the connection and causing lots of problems as it could
not get back out. Over time, I have found that somewhere the silicone
will leak, usually between it and another surface. Capillary action
just draws the water in!
I'd suggest two wraps of good electrical tape. I have had good luck
covering the tape with coax seal. The tape lets you get the seal off
and leaves the wire 'clean'. I have heard that coax seal will get
brittle but have not had that problem... have a number of connections
that have been in the WX for years.
If the connection is large, multiple splices etc., place them in a
plastic or metal box, sealed to the wx on top with a hole on the bottom
to allow it to 'breathe'! Bring the wires in through the bottom.
Why not consider "N" connectors for that 9913? They are water tight if
properly attached!
Just my experience.
73 Den W2DEN _._

In article <Gxnn5.2567$x16.178003@monger.newsread.com>,
"Roger Halstead" <rdhalste@tm.net> wrote:
> I thought I'd put this into a thread by itself.
>
> From time to time some one will mention the use of Silastic RTV @, or
other
> brands of silicon sealant for use in amateur Radio.
>
> Much of it works great and there are other materials out there that
work
> well too.
>
> I'd assume that the acrylics work well too, if given a chance to
fully cure
> before being put out into the elements.
>
> A major word of caution though.
> Any of the RTVs that smell like Acetone do so because you really are
> smelling Acetone.
>
> In confined places with prolonged contact, Acetone is corosive to
copper,
> aluminum, and solder.
>

> There are a number of RTVs that do not use acetone, but rather
alcohol and
> possibly other agents. In general they use the moisture in the air to
aid
> curing as do those that smell like Acetone.
>
> I've heard salesmen get really excited and claim that "their brand"
is not
> corrosive, but if it smells like Acetone... and theirs did!
>
> As I mentioned in another post, one company ended up with a very large
> expense because they were using an RTV (that smelled like Acetone) to
pot
> some transducers and printed circuits in some cast Aluminum boxes.
>
> A year later the circuits started failing and dismanteling showed
that the
> wires, printed circuits, and solder joints were just crumbling away
to be
> left by a white (or green) powder.
>
> I "prefer" to use DC-4 compound *in* connectors. It's a dielectric
grease
> that was developed in WWII to fill the spark plug connectors in B-17s
and
> other aircraft to keep them from arcing at high altitude.
>
> The stuff is clear, but *messy* and expensive. Some antennas come
with a
> tiny capsule of it and no, I'm not talking about Pentrox. It does
form a
> film that stays and prevents oxidation.
>
> I also use the Marine "Liquid Electrical Tape" which works great.
Doesn't
> last long after the can has been opened, but works great. I usually
run
> out, before it drys out any way. <:-)) It's not very expensive
either.
>
> When using DC-4, I typically fill the connector with DC-4, make the
> connection which squeezes grease all over. I try to keep the grease
from
> covering the outer surface of the connector. Then clean up and give
the
> connector at least three coats of the liquid electrical tape. Allow
plenty
> of dry time between coats.
> No, I've never noted a problem with an impedance bump using the
grease in

> the connectors and I checked a few with a time domain reflectometer.
> You do have to give the connectors a thorough cleaning after the
grease
> though or absolutely nothing will stick. <:-))
>
> For most work, I just use the liquid electrical tape. On UHF
connectors you
> want to make certain that the entire connector is covered after
assembly.
> Water can get in either end.
>
> When using 9913 or similar cables I use the grease as water in one
end will
> run right on out the other and the normal connectors only slow it
down a
> little.
>
> There is a stain on my operating desk right at the back of my two
meter
> rig from where the water was dripping on the desk.
> I hadn't filled the connectors and a lightening hit took the tape off
the
> outside of the connectors up on top. That leak cost me nearly 200
feet of
> 9913.
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
>

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820. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a24b5f.4577259@news.akorn.net>
Source record: 181950

On Mon, 21 Aug 2000 20:40:59 -0400, "R.P.Haviland" <bobh@iag.net>
wrote:

>For an RF ground, the best connection is a very short braid or strap to a
>good ground such as several ground posts.

Braided or woven conductors have several times the RF resistance of
smooth surface conductors the same diameter.

Braiding should be used only if the connection needs to be flexed, or
on short leads.

73 Tom

821. CW character weight -- lost the thread

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <h_ro5.461$u5.972@newsfeed.slurp.net>
Source record: 181951

Weight can be controlled with a triangular-wave baud generator feeding a comparator, into the usual TO-style circuitry. That scheme will expand and contract the elapsed time between leading and trailing edges symmetrically, without changing rate. The cktry has its operational problems.

Does anyone know how Curtis chips do weight control?

I gave up on this one years ago and went that way, after trying a digital scheme involving a high-speed clock, division down, OR-ing, hopeless complexity, sigh ...

K3BHJ

822. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a24bdf.4705010@news.akorn.net>
Source record: 181952

On Tue, 22 Aug 2000 01:26:52 GMT, cathexis@erols.com (Set'em up Joe)
wrote:

>On
> Big THX to all. Both I and 1310 WDCT are located in
>Fairfax City, VA. 22030. I've taken down the antenna (See,
>"Project Skywire, No More", new post). Still, there's a new wire
>up and so I'd like to finish this thread properly. First of all, I'm a
>newbie and don't know what my rights are re: other peoples'
>RFI. What do you mean about going after this AM BCB station?
>I need some background here, please.

Hi Andrew..

I was wondering if it was the same station, I guess it is not.

I thought their problem came back.

The only stuff I hear now is the crap on 1830 from two stations in
Chatanooga that are mixing. The FCC has tracked that down to a problem
at one of the stations in Chatanooga Tn. When that is gone, I might
hear other stuff under it.

My point is mainly that sometimes BC stations are at fault, much of
the time the receiver is at fault and the stations are OK. You have to
know how to sort the problem out.

The rights are simple, the staions have a guidline for harmonic and
spurious suppression...but are still not allowed to cause harmful
interference. You just need to be sure to know how to tell who's fault
it really is before taking action.

73 Tom

823. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a24de7.5225134@news.akorn.net>
Source record: 181953
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

On Tue, 22 Aug 2000 08:59:05 +0200, "J. Simons, PA0SIM" <jmsi@oce.nl>
wrote:

>Tom, I am a little confused.

So am I now.

I'll reread this all later, when I'm awake.

824. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20000822074608.13731.00000432@ng-cl1.aol.com>
Source record: 181954

Pete -

I also have a Titan and IC 746 . . .

Your GAP Titan does not need to be grounded and you can forget about radials. In fact, there is no way to ground it since it is a vertical split dipole.

For lightning protection, you can ground the mounting mast and/or use a lightning arrestor. GAP does not recommend long ground wires in any event as they start to act like an antenna themselves. They detune the GAP and, in addition, create all kinds of RFI. GAP told me to tape a foot or so of the feedline to your ground rod right at the point above where the feedline takes a right angle turn to go to your shack. Theory being the lightning will jump through the coax to the ground wire rather than turn 90 degrees and continue to the shack. I can't comment on how accurate that is but it can't hurt. It might help in a direct strike but it provides no "bleed off" of a building charge.

Check out www.polyphaser.com for a very good article about Ham Radio Station Protection. They say protection should be installed close to the antenna and away from the shack.

More GAP advice - - You must run the feedline down vertically from the antenna as far as you can before you run it horizontal or it will create RFI also. This is very important if you have 100 feet of feedline My GAP is on the roof and I run the line all the way to the ground some 30 feet before it turns horizontal. I had terribly RFI when I ran the feedline across the roof.

For grounding, I understand two 4 foot grounding rods 8 feet apart are better than one 8 foot rod. So, forget about going down 8 feet - you don't need to.

Your plan for a 6/2/70cm antenna makes no sense for the IC 746. It doesn't cover 70cm. And, it has a separate antenna jack for 2 mtr. In other words, you would have to hook the antenna up to 2 different output jacks to feed it on 6 and 2. Your GAP will load up on 6 mtrs (you won't use 6 very often anyway) so just get a 2 mtr. antenna and be done with it.

Running the feedlines close together should be no problem. If it is, your coax is radiating and that is not good.
K4IA
Buck
Fredericksburg, Virginia USA

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825. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39A26B99.C6270C1F@mwci.net>
Source record: 181955

George , W5YR wrote:

> I have recently run across the Matlab program (student edition) at what
> appears to be a very good price - $30.
>
> From the description, it is very similar to the Mathcad program which I
> have seen mentioned in postings on this NG. It is limited in matix size
> to a maximum of 32x32 but otherwise is fully functional as to graphing,
> equation solving, etc.

I have the Mathcad 6.0 Professional version that I like very much. It is a couple of hundred dollars more than the basic version but has a lot of advanced features, several of which I have used. I have found that the cost of the more advanced version is justified because the extra power is there when I need it. It also does matrix operations quite well.

I also prefer it to spread sheets by a wide margin.

The Mathcad 2000 version has some extra features that are not important for me, so I will not upgrade, but I would recommend it as an initial purchase.

Bill W0IYH

826. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: kk5yy@arrl.net
Message-ID: <39a27bc5.293136560@nntp.mindspring.com>
Source record: 181956

On Tue, 22 Aug 2000 09:46:13 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Tue, 22 Aug 2000 04:19:09 GMT, kk5yy@arrl.net (Gerald Schmitt)
>wrote:
>
>>On 21 Aug 2000 11:14:43 GMT, n8blk@aol.com (Art Clemons) wrote:
>>
>>The Outbacker data you cite is an absolutely worst case scenario for
>>the Outbacker and it did in fact beat a loaded CB 1/4 wave antenna.
>
>The UNloaded 11.5 foot whip antenna it did beat was a very very poor
>system.

The SGC tuner was so close to the base of the whip I sort of
considered it base loaded, semantics. Heated up? that's
news to me. Were you there? If so we didn't meet but I had
to leave early to do my satellite demos.
>
>Most good antennas were around 62 dB, and some a few dB higher. 6-10
>dB down may not sound like when signals are strong, but it's a huge
>difference when signals are marginal.

Agreed I never use the thing except when I am traveling by air and
it is carry on luggage.
>
>>You can gain a bit by grounding an Outbacker and matching the load.
>>It's pretty much the same as a Hustler or Hamstick. As you can see
>>from the results you just don't get there on 75 until you get a center
>>mounted coil of some reasonable diameter.
>
>A large diameter has nothing to do with it. In many cases, Q is
>higher with a longer smaller diameter coil of reasonable size wire.
>
>>The most interesting thing of the lot was the stainless steel coil
>>bugcatcher. It was very much a copy of the 480 coil that Henry
>>Allen makes but in stainless. Guess that makes a case for
>>ohmic losses and efficiency.
>
>Ground losses swamp out changes in loss resistance in antennas. The
>larger the vehicle you put the antennas on, the more the spread in
>efficiency when ESR in the antenna is minimized.

Woa Tom this was mounted on the same vehicle as several other test
antennas. I would not have put that much credence in it myself had

I not seen the results. I think I have to go with the observed
results.

>
>The smaller the vehicle, the more important current distribution in
>the antenna becomes.
>
>Hams that think large diameter coils offer optimum performance are
>missing the boat. Even a #14 wire coil can have Q of around 300 in a
>mobile, and the largest coils are lucky to reach 600. When the coil
>requires a large amount of reactance, a long slender coil with smaller
>wire can (and usually does) have more Q that a large diameter large
>conductor inductor.

I'll have to model this to convince myself all the work I have done
seems to indicate wider is better (forgive me Pontiac) up to a
point at least.
>
>All other things equal that amounts to a very small change when ground
>losses are considered. With a perfect ground that would be an
>efficiency change of 2, half the loss with the larger coil. When
>ground losses are thrown in, the difference is meaningless.
>
>Moving from 100% base loading to 100% top loading will change
>efficiency by a factor of four.

Agreed but the discussion was Outbackers vs Hamsticks vs Hustlers.
The Outbacker is not base loaded even using the 75M tap the effective
coil is 1/3 of the way up the mast. The 75M Hamsticks seem to start
the loading at that point also.

The most help for any of these type of antennas seems to come from
proper base matching. I'm not talking about base loading but matching
the impedance to the source.
>
>73 Tom

Well got to get on the big aluminum tube see you guys in a few days.

73 Jerry

827. Re: Dualband Base for Tree??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000822094400.11778.00000776@ng-fy1.aol.com>
Source record: 181957

>From: "Frizz" senorpurpl@hotmail.net
>Date: Mon, Aug 21, 2000 7:32 PM
>Message-id: <8nsl7p$bs0$1@bob.news.rcn.net>
>
>What would be a small but decent dual or even tri band antenna for hiding
>in
>a tree? I really need one that is easy to get up in a tree and that is
>easily hidden (ie nothing really big). What do you recommend and have used
>in the past for stuff like this? I have antenna restrictions and have heard
>many recommendations from hams on the air but have either forgotten the
>model numbers or have not been able to find the antennas they are talking
>about. Any tips? Thanks!
>
>
>KG4IVT.

It would help if you mentioned the frequency you want this antenna
for.

73 Al Lowe N0IMW

828. Marine Radio Antenna cable specs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Ted Ling <lingted@Hotmail.com>
Message-ID: <wJvo5.197$Z96.29520@sea-read.news.verio.net>
Source record: 181958

A friend and I are installing a VHF Marine radio in his 1989 5th wheel. He's laced a Shakespeare 5206-C antenna on a 15' pole. The camper is already wired for cable TV. I know some of the cable is RG-59, but am not sure if all of it is. The antenna came with RG-8 or RG-58 (the smaller diameter of the two). Can we mix and match these cables? Will the RG-59 work OK for these frequencies? What cables (types) are appropriate to use in this application?

829. Re: 2m antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: oscar <oscar@noname.com>
Message-ID: <39A2883A.A8D2BFA6@noname.com>
Source record: 181959

Hi T

A quad is directional, that it receives better in the direction you point it.

If you want to work 2m repeaters or other on voice simplex you need to
aim the antenna in the direction of the other station. Most important,
is the polarization of the antenna, Vertical for the above and
Horizontal for ssb.

For Vertical polarization, you mount the antenna so the feed line is
at the right or left corner.

Horizontal you feed it at the top corner or lower corner.

Here a a nice site to help you, it has graphics of quad beam.
http://www.softcom.net/users/kd6dks/quad.html

Any more ? just post them and you will be on the air asap !

73 o

"T. wrote:

> A relative gave me a nice little homemade quad antenna that he used on 2m.
> I have a simple question: How do I mount and orient this antenna? Should I
> attach it to a rotor or is it omni-directional?
> It has a short "mast" attached which appears to have been attached at a
> right angle to the main mast by means of a "U-bolt" clamp.
> All help is appreciated.
> T.

830. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <39A2885C.74F3C0A4@NO.excite.SPAM.com>
Source record: 181960

CCR's notification varies from state to state. In Maryland they have to provide you with a copy of the active CCRs in advance for new homes and on demand on all homes. In Illinois they don't have to provide them at all or even tell you they exists. However, you must sign a document that the home is part of a PUD and there are CCRs. When in doubt, place a request for ALL CCR's in advance and in writing, even those that are not active. If none are provided, if you make an offer, place in the offer that no CCRs are to be placed on the property and the seller will reimburse any and all moneys at anytime if any CCR's are on the property. If they do exsist, see if they are still active or legal. You should have seen the look and seen how fast two lawyers can move when I canceled the closing in the middle of the closing after they handed me my CCRs acknowledgement form and told them I was not buying the property for violation of this term in the selling agreement. I did settle, the restrictions were not a problem, sq. footage of house, fence, wells. BTW, there are many old expired CCRs. My mother cannot erect a fence beyond the front face of her home upto 1971. After 1971, she can put on up anywhere she wants but never has. There CCRs about selling to minorities which are mute now. I have a restriction on the use of barb wire and the size of my outhouse, like I really going to erect an outhouse.

If you are looking for a existing house look at homes built before 1965 or find a very knowledgeable Real Estate agent and let her know about will be placing this in all offers. If building, find a lot in non-planned development or older neighborhoods.

Best of luck

Dennis WB3KUM/9

831. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39A29618.C0A6183F@wb6hqk.ampr.org>
Source record: 181961

hasan schiers wrote:
>
> Many of today's dual band (70cm/2m) mobile antennas claim to be two 5/8's
> collinear on 70cm and either a single or half-wave or 5/8 wave on 2m. Many
> use a simple open coil in the center between the two 5/8 sections. (Some
> encapsulate the coil, but same difference)
>
> As I understand the discussion, it is being stated that these antennas DO
> NOT work properly in collinear fashion because the phase shift is not (and
> cannot be made) large enough with a coil. (I'm referring to how they are
> sold, not by kludging in a replacement stub or center tap) This is what I
> have gleaned from Roy and Tom's comments.

I don't see how the current distribution could be optimum for maximum
broadside gain when the upper element is 5/8 wl in length. If maximum
broadside gain is the objective, the upper radiator should be very close
to half wave resonance. The idea is to minimize the current required to
feed the upper element by exploiting the so called 'antiresonance' at a
half wave. Roughly twice the feed current shows up as undesirable
common mode on the phase inverter which should be minimized.

> From Roy's earlier post, it seemed that he was saying that if you try to use
> a coil for the required phase shift you get reduced gain and and elevated
> lobe (not at horizon). As I understood it, there was still gain over a
> single 5/8 wave, but not at what appears to be a "useful" elevation.

Just because it looks like a coil doesn't mean it's a coil. The device
may electrically behave similar to a coiled up transmission line, or
self resonant tank either of which could be capable of generating the
necessary voltage and current relations if there was sufficiently low
common mode impedance to ground. Of those antennas I have examined, I
seriously doubt the common mode impedance is low enough to enable
maximum broadside gain but I can't say for sure without a careful
analysis.

> If this is true, it seems that a straightforward 5/8 for 70cm would likely
> outperform these "collinears" at the horizon. If that is true, then many of
> us who have serious needs for good performance on 70cm would be better off
> with a separate 70cm 5/8 wave and forget about the dual band "alleged"
> collinears that seem to be the rule of thumb these days.

There's a bit more going on... A mobile antenna in the typical urban
clutter environment can encounter very high levels of multipath
interference. Signal strengths tend to increase six dB for every
doubling in height and the antennas you describe do manage to increase
the effective height of the radiator in spite of acheiving less than

optimum broadside gain. A dB or two of lost gain may well be
compensated by the increased effective height.

My personal experience is that a 1/4 wl 'spike' on 450 MHz performs
every bit as well as one of the 'top quality' 1/2 wl over 1/2 wl mobile
antennas. YMMV of course.

> Do I have this right, or have I completely jumbled this up in sifting
> through all these interesting posts about the "collinear conundrum" ?

You got it right but be aware the thread has only touched on the basic
operating principals of vertical collinear antennas. The devil is in the
details, especially when considering the multipath mobile environment.

bart
wb6hqk

832. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <KFwo5.885$od3.36694@newsread1.prod.itd.earthlink.net>
Source record: 181962

I'm currently sealing connectors with a Teflon foam (sold by AES - forgot the brand name) that is supposedly used in the cable TV industry. You fill up the PL-259 shell with the stuff from a squeeze tube, and then screw the connector together. It fills all the voids and even seals the thread. Haven't taken any of the joints apart yet, so don't know how it holds up over time.

--
Floyd Sense - Angier, NC
"Jim Weir" <jim@rst-engr.com> wrote in message
news:fiqups4bpncrjjfrembse9mgndi6fv8dpt@4ax.com...
> Gray Frierson Haertig <gfh@haertig.com>
> shared these priceless pearls of wisdom:
>
> ->One antenna manufacturer recommends flooding outdoor Type N connectors
> ->with petroleum jelly before connecting. I admit this makes me a bit
> ->nervous, but I haven't seen any failures yet in installations up to 250
> ->watts VHF after several years. It's an interesting idea. Does anyone
> ->else have any experience with this?
>
> Yes. We used to use flooded Vaseline connectors with plain old sleeving
tied
> with wax cable back in "the old days" before shrink and silicone. Other
than a
> freakin' mess if you ever had to work on them after mating, they worked
just
> fine and lasted forever. This was in the 120 MHz. range with powers of 25
to
> 100 watts.
>
> Jim
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup
>

833. Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20000822111909.15226.00000726@ng-cd1.aol.com>
Source record: 181963

If this is such a killer antenna why doesn't every ham scramble and build one now?

By the way...Arnie Coro is a better man than anyone needing to post stupid comments about an antenna no one gives a damn about in a news group.

Bottom Line: No one really cares about your bullshit, Chip. Take it to the ARRL and see if you get published in any real sense. Better yet...why dont you go to one of the publishers that let you publish anything you want as long as you pay all the costs? That way your great grandchildren can curse you as they haul all ten thousand copies that never sold out of your attic when you croak.

I think you, your cohorts AND your critics all oughta get a life. Go play with your radios, quit spreading your sewage, shut up, grow up, be amateur radio operators.

The subject, the attitudes, the whole thing...utterly goddamn useless. Use some of that intelligence that gave you the ability to earn a PhD and accept it sometime soon...maybe after a long few minutes of looking in a mirror.

834. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <93HcWEADlmo5EwYe@ifwtech.demon.co.uk>
Source record: 181964

Tom W8JI wrote:
>On Mon, 21 Aug 2000 09:17:07 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.com> wrote:
>
>>I'm looking for a method of placing a switch at the top of a 1.5-2in
>>pole, so low weight and windload are important. Any experience of small
>>vacuum relays in such locations, for example?
>
>
>Surplus latching vacuum relays are cheap and readily available here in
>the USA.
>
>SPST relays are available from several sources, including Allan Bond
>in Marietta GA..

Thanks, Tom - a latching relay would be just the thing. I'll try to get one, and see how it works.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

835. Re: Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000822115611.11916.00000623@ng-mf1.aol.com>
Source record: 181965

>If this is such a killer antenna why doesn't every ham scramble and build one
>now?
>
>By the way...Arnie Coro is a better man than anyone needing to post stupid
>comments about an antenna no one gives a damn about in a news group.
>
>Bottom Line: No one really cares about your bullshit, Chip. Take it to the
>ARRL
>and see if you get published in any real sense. Better yet...why dont you go
>to
>one of the publishers that let you publish anything you want as long as you
>pay
>all the costs? That way your great grandchildren can curse you as they haul
>all
>ten thousand copies that never sold out of your attic when you croak.
>
>I think you, your cohorts AND your critics all oughta get a life. Go play
>with
>your radios, quit spreading your sewage, shut up, grow up, be amateur radio
>operators.
>
>The subject, the attitudes, the whole thing...utterly goddamn useless. Use
>some
>of that intelligence that gave you the ability to earn a PhD and accept it
>sometime soon...maybe after a long few minutes of looking in a mirror.
>

Disruptive technologies usually have profound critics--such as yourself--who
make extra special efforts to attack:

1) without any support from fact;
2) targetted to discredit the individual for things actually not said,
implied, or inferred;
3) diverting the argument to base issues which have nothing to do with the
matter at hand.

Rest assured, in coming months, there will be yet more fractal antenna designs
for use for experimentation by hams. I am proud of the 'gung ho' attitude of
the amateur radio fraternity, and extremely plased to have presented a design
which has no peer in the small size I was asked to consider.

With best wishes,

Nathan Cohen, Ph.D.
N1IR

836. Re: Aerial for VLF/LF monitoring

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8nub7t$2dl$1@neptunium.btinternet.com>
Source record: 181966

Try a simple untuned vertical, the tallest whip you can get.
Mount it high, eg, on the roof of the building. Connect an
RF choke between bottom end and ground. Connect signal
across choke to the gate of an FET. The FET is a source
follower. Take the output from the FET source to your
equipment via a 75-ohm coaxial line.

You can feed the DC supply (9V, 5mA) for the FET source
follower over the inner conductor of the coax.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Richard C. Ferryman <106255.1565@compuserve.com> wrote in
message news:qbdvpsgg6jo8edr9nrgfh8ntotb4gbeqdt@4ax.com...
> Can anyone suggest an antenna that I could use to feed my
spectrum
> analyser for monitoring between about 50 kHz and 200 kHz.
It needs to
> roughly match the 50 ohm input and be broadband over that
range. I
> had considered a large sinle turn shielded loop fed
directly with coax
> (no capacitors), or a small winding on a large ferrite
rod. Any
> suggestions?
> Richard.

837. Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: M1nn0w <1c3d0g@att.net>
Message-ID: <0Ayo5.24606$4T.1483671@bgtnsc07-news.ops.worldnet.att.net>
Source record: 181967

I posted this question under another topic but never got an answer. I 'll
try again.
Can one use Ladder line on a Aluminum sided house with storm
windows???? I understand that the desire is to keep the line away from metal
whenever possible.
Perhaps the question is dumb but I'm really interested as I'd like to run a
Long Wire outside
but getting back into the house seems like it might be a problem????????

838. RE: Answer to Ed's Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000822131728.15431.00002165@ng-ch1.aol.com>
Source record: 181968

Addendum: Here's some MORE useful info. Modeled with good ground, 1/8 wave up:

Antenna F.S. at 10 degrees el

K2 FracFlyer -4 dBi
W8JK -4.7 dBi
Slanted 'H' -5.9 dBi
Dipole -6.4 dBi
Hor.Loop -9.3 dBi

Are we to conclude that all antennas are 'deaf', and that the K2 is the worst? That's not what the data says.

73
Chip N1IR

839. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: tegwilym@my-deja.com
Message-ID: <8nue14$up6$1@nnrp1.deja.com>
Source record: 181969

> Hi Tom,
>
> One problem I see with slinky antennas is the effect of all that
> inductance is ignored.
>
> For example slinky's are often used as Beverages, but the promoters
> assume the impedance of the slinky is the same as a non-coiled
> conductor and ignore the loading and phase delays effects of all the
> hundreds of turns of wire.
>
> How many turns are in the slinky antenna you have? How are they
> distributed, evenly? How is the antenna fed, like a dipole? How is the
> feedline routed? How far from house wiring is it?
>
> Remember any antenna right in the middle of your house is going to be
> a problem, becuase it will couple to every conductor within a few
> wavelengths with an intense field. I'd expect RFI unless you run flea
> power.
>
> Can you get anything outside? No balcony?

Oh yeah, I guess it would act like a large inductor with all the coils it has. I never really thought about that, but it make sense.
I don't know off hand without looking at it how many coils it has (I'm sending this message from work...shame on me!), the antenna is hung like a dipole about 13 feet across with the coils about 1/2 inch apart. It is fed with a 20 foot coax (50 ohm) going into one of the bedrooms. I'm not sure what kind of house wiring is behind the wall, but I'm sure there is something. I do have a patio with a 6 foot tall wood fence around it that I should try hanging it on and see what happens. I haven't tried that yet.

Sent via Deja.com http://www.deja.com/
Before you buy.

840. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A2B934.40C2E538@oio.net>
Source record: 181970

M1nn0w wrote:
>
> I posted this question under another topic but never got an answer. I 'll
> try again.
> Can one use Ladder line on a Aluminum sided house with storm
> windows???? I understand that the desire is to keep the line away from metal
> whenever possible.
> Perhaps the question is dumb but I'm really interested as I'd like to run a
> Long Wire outside
> but getting back into the house seems like it might be a problem????????

Yes, you can.
'Doc

841. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Cortlund Richmond <crichmon@usa.alcatel.com>
Message-ID: <39A2C2D7.BB6EC819@usa.alcatel.com>
Source record: 181971

Roy,

I suspect that the coils we see are by no means intended to be resonant tanks, but are merely meandering delay lines. A 180 degree long wire is STILL a 180 degree phase shifter.

Cortland

Roy Lewallen wrote:

> Hasan,
>
> I agree, but with one modification. As Tom Bruhns has pointed out, the
> coils on some commerical collinears, such as cell phone antennas, are
> pretty long. These would be subject to coupling to the antenna elements,
> and the current at one end wouldn't necessarily be equal to the current
> at the other, as in the idealized zero-size circuits I modeled. So it's
> possible that the commercial collinears do work as advertised. At least,
> my modeling shouldn't be extended to conclude that they can't.
>
> Roy Lewallen, W7EL
>
> hasan schiers wrote:
> >
> > Many of today's dual band (70cm/2m) mobile antennas claim to be two 5/8's
> > collinear on 70cm and either a single or half-wave or 5/8 wave on 2m. Many
> > use a simple open coil in the center between the two 5/8 sections. (Some
> > encapsulate the coil, but same difference)
> >
> > As I understand the discussion, it is being stated that these antennas DO
> > NOT work properly in collinear fashion because the phase shift is not (and
> > cannot be made) large enough with a coil. (I'm referring to how they are
> > sold, not by kludging in a replacement stub or center tap) This is what I
> > have gleaned from Roy and Tom's comments.
> >
> > From Roy's earlier post, it seemed that he was saying that if you try to use
> > a coil for the required phase shift you get reduced gain and and elevated
> > lobe (not at horizon). As I understood it, there was still gain over a
> > single 5/8 wave, but not at what appears to be a "useful" elevation.
> >
> > If this is true, it seems that a straightforward 5/8 for 70cm would likely
> > outperform these "collinears" at the horizon. If that is true, then many of
> > us who have serious needs for good performance on 70cm would be better off
> > with a separate 70cm 5/8 wave and forget about the dual band "alleged"
> > collinears that seem to be the rule of thumb these days.

> >
> > Do I have this right, or have I completely jumbled this up in sifting
> > through all these interesting posts about the "collinear conundrum" ?
> >
> > ...hasan
> >
> > Roy Lewallen <w7el@eznec.com> wrote in message
> > news:399ADB8B.7641E211@eznec.com...
> > > It sounds to me like two different things are being compared here. The
> > > currents at the two terminals of a capacitor are in phase. The currents
> > > at the two terminals of an inductor are in phase. Neither will produce a
> > > phase shift in the current from input to output. No two-terminal device
> > > (of zero length) can -- it violates Kirchoff's law.
> > >

--
Cortland Richmond

842. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Cortlund Richmond <crichmon@usa.alcatel.com>
Message-ID: <39A2C6BF.414D006E@usa.alcatel.com>
Source record: 181972

Jim

I've never thoght this could be better than a plain wire. If you need a good RF ground up in the air, put down a metal sheet (foil is OK) big enough to have fairly good capacitance to free space. Then you can use that as the local RF ground at frequencies where the capacitance is a low impedance. This does not replace the power safety ground and static drain, which can be a direct run of the appropriate sized wire to a good ground per your building codes.

Cortland

Jim Bo wrote:

> Hello,
>
> I read many many years ago about a method of grounding a ham radio
> transmitter that is located on the second floor of a house.
>
> It involved using coax. The dc path for the ground was the center
> conductor. The "different" part of this method involved taking 0.001
> microfarad caps and connecting them at each end of the coax from the
> outer braid to the center conductor. There was no dc connection to the
> braid, but at each end the braid was connected to the center conductor
> via the 0.001 microfarad caps.
>
> This was supposed to make a better rf ground for the radio located on
> the second floor.
>
> Does this make sense? What principal is in effect that makes it "sense?
>
> Thanks in advance.
>
> Jim
> *

843. Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13841-39A2CE25-32@storefull-118.iap.bryant.webtv.net>
Source record: 181973

In this newsgroup Roy Lewallen recently faulted Bill Orr for a claim that the folded unipole could be less lossy than a straight vertical antenna, after I said you could probably rely on Bill Orr.

After 40 years, I again have a copy of Laport`s "Radio Antenna Engineering", and it`s good.

Eb Laport says, the drivepoint resistance of a folded unipole with a pair of identical conductors will be 4 times that of a similar straight vertical antenna.

For instance, suppose we have a loss resistance of 13 ohms in series with our antenna system. With a straight vertical, the drivepoint resistance may be about 37 ohms, and with a power of 5000 watts (use milliwatts if this offends your amateur radio sensitivity), our current is 10 amps. Our loss is 1300 watts.

With a folded unipole whose drivepoint resistance is 148 ohms, our current is 5.57 amps into 161 ohms. Our loss is 404 watts in the same 13 ohms.

404 watts is less than 1300 watts, thus it is possible to reduce antenna system loss by using an antenna whose drivepoint resistance is a larger fraction of the total system

844. Re: CW character weight -- lost the thread

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn8q5ks5.u6f.X@animas.frontier.net>
Source record: 181974

Maybe rec.radio.amateur.homebrew versus rec.radio.amateur.antenna?

Jonesy W3DHJ
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

845. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000822162450.04079.00000440@nso-fr.aol.com>
Source record: 181975

In article <39a3faa4.260075294@nntp.mindspring.com>, kk5yy@arrl.net (Gerald Schmitt) writes:

>The Outbacker data you cite is an absolutely worst case scenario for
>the Outbacker and it did in fact beat a loaded CB 1/4 wave antenna.
>.
>The Outbacker tested was on a mag mount with no attention paid to base
>matching and/or grounding. Reasonable match to the transceiver was
>accomplished by the loss due to capacitive matching to the body of the
>small imported rental car.

You'll note that I always say that the worst antenna I know of for mobile HF work on 75 or 40 meters is a base loaded whip.

I've actually played with an Outbacker on a reasonable mount on a mast, which placed it above the roof of the vehicle, the results were still less than Hustler resonators or even a Lakeview hamstick. I still think that there are uses for the Outbacker as I oiginally said, but for hams with the same vehicle everyday, they just aren't a cost efficient or good choice. They're sturdy, and well engineered, and allow multiple band usage with only a small amount of attention to detail (moving the wander lead & adjusting the "stinger") but at best, they're spiral whips. Something I didn't try was using one as the stinger for a center loaded coil, but of course that probably defeats the purpose.

I also note that I've seen one mounted on a motorcycle, and it actually made sense to use one for the motorcycle, but specialized usages don't mean that it's normally a good buy.
-art clemons-

846. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A2E44D.72ED7E18@eznec.com>
Source record: 181976

Sigh.

Let's take your number of 13 ohms "in series with our antenna system", i.e., ground system loss. Your monopole puts, as you say, 10 amps into the ground system for a total of 1300 watts.

Now, take a close look at how your folded monopole is connected to ground. One side of the source is connected to ground. What you and many others forget about is that one conductor of the monopole is also connected to ground. So the bottom of the source is connected to the bottom of the other monopole conductor, and the combination is connected to the Earth through 13 ohms. An easy way of looking at what happens is to observe that the current from the bottom of the source is now half of what it was with the unfolded monopole. (I'm neglecting, for simplicity, the modification in feedpoint resistance caused by the loss, but I'll include that in the more detailed analysis.) The current into the ground system from the other monopole conductor is equal to the current from the source, and is in phase with it, so the net current into the ground system is just what it was before. Consequently, the loss is the same as before. This is what I explained to Orr many years ago, and what has been posted here a number of times (most notably after the claim that the Uni-Hat was more efficient because of folding -- a claim which I don't believe is any longer being made).

A more detailed analysis goes something like this. The current from the bottom of the source and the current from the second monopole conductor are equal and in phase. So we can split the ground resistance of 13 ohms into two parallel 26 ohm resistors. That is, the bottom of the source can be considered to be connected to the Earth through a 26 ohm resistor, and the second monopole conductor through its own 26 ohm resistor. These resistors can be separated so they don't share current. (Because equal currents flow through the resistors, the voltages at their tops is equal, allowing us to separate them.) Now, the source sees 148 ohms + its ground resistor of 26 ohms + 26 ohms of resistance from the second monopole conductor resistor. (There's a 1:1 transformation of this resistance in referring it from the end of the second monopole conductor to the feedpoint. You can verify this with EZNEC, or analytically if you'd prefer.) So the source sees a total of 200 ohms. At 5000 watts, the current is exactly 5 amps. 5 amps flows through the 26 ohm resistor at the base of the source, for a loss of 650 watts in that resistor. 5 amps flows through the 26 ohm resistor at the base of the second monopole conductor, for a loss of 650 watts in that resistor. The total loss is 1300 watts, precisely at it was before.

Feel free to use some other way of analyzing the loss with the folded monopole. Just don't ignore the current going into the ground from the second monopole conductor.

Roy Lewallen, W7EL

Richard Harrison wrote:
> In this newsgroup Roy Lewallen recently faulted Bill Orr for a claim
> that the folded unipole could be less lossy than a straight vertical
> antenna, after I said you could probably rely on Bill Orr.
>
> After 40 years, I again have a copy of Laport`s "Radio Antenna
> Engineering", and it`s good.
>
> Eb Laport says, the drivepoint resistance of a folded unipole with a
> pair of identical conductors will be 4 times that of a similar straight
> vertical antenna.
>
> For instance, suppose we have a loss resistance of 13 ohms in series
> with our antenna system. With a straight vertical, the drivepoint
> resistance may be about 37 ohms, and with a power of 5000 watts (use
> milliwatts if this offends your amateur radio sensitivity), our current
> is 10 amps. Our loss is 1300 watts.
>
> With a folded unipole whose drivepoint resistance is 148 ohms, our
> current is 5.57 amps into 161 ohms. Our loss is 404 watts in the same 13
> ohms.
>
> 404 watts is less than 1300 watts, thus it is possible to reduce antenna
> system loss by using an antenna whose drivepoint resistance is a larger
> fraction of the total system

847. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <sq5proo4t9126@corp.supernews.com>
Source record: 181977

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39A26B99.C6270C1F@mwci.net...
> The Mathcad 2000 version has some extra features that are not important
for
> me, so I will not upgrade, but I would recommend it as an initial
purchase.

The only problem with not upgrading is the worksheets are not fully backwards compatible with earlier versions, even if they are saved as a prior version. The only time somebody will find out is when they load the worksheet and find an equation area inserted as a bit-map. The only way to avoid the problem is to keep a copy of the manual around to reference (for the version you want to save the worksheet in) so you don't use functions that don't exist in it. I don't know why Mathsoft can't highlight the functions that don't exist in a selected prior version so you don't have to play the save and try it out game. Otherwise It is a great program which I have used at work, home, and for some class projects I had to do a few years ago.

--
Leland C. Scott
KC8LDO

848. Re: Dualband Base for Tree??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: K I 5 F J <jenjoeo@zianet.com>
Message-ID: <39a2ea27.0@oracle.zianet.com>
Source record: 181978

If you can bury twelve 33 ft radials around the tree and run up a 33 ft
wire a few inches away from the trunk you will have a better than average 40
meter vertical that can be matched on other bands.

K I 5 F J

"Frizz" <senorpurpl@hotmail.net> wrote in message
news:8nsl7p$bs0$1@bob.news.rcn.net...
> What would be a small but decent dual or even tri band antenna for hiding
in
> a tree? I really need one that is easy to get up in a tree and that is
> easily hidden (ie nothing really big). What do you recommend and have
used
> in the past for stuff like this? I have antenna restrictions and have
heard
> many recommendations from hams on the air but have either forgotten the
> model numbers or have not been able to find the antennas they are talking
> about. Any tips? Thanks!
>
>
> KG4IVT.
>
>

849. CW spacing (was wire antennas free luch but drifted)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a2899c.20512815@news.akorn.net>
Source record: 181979

On Tue, 22 Aug 2000 08:59:05 +0200, "J. Simons, PA0SIM" <jmsi@oce.nl>
wrote:

>Tom, I am a little confused.

Me too, especially at 5 AM.

>33% weight makes the dots 2/3 of the original length.
>If dashes are/stay 3 times the dots, then
>dash length = 3 * (dot length * 2/3) = 2 * dot length?

>As far as I understand the dashes are shortened or extended the
>same amound of time as the dots.
>As a consequence the ratio between them is not constant.

You're right. I checked the algorythm of a keyer I helped do and
that's what we did in the software and it sounds fine. I remember we
did a couple of attempts that "sounded wrong" when weight was
adjusted.

We shortened the dots and dashes by the same amount, and quantify the
weight only by dots. But that isn't based on a ratio change between
dot an dash length. It's a duty cycle change. I think the reason it
sounds OK even with an unintentional ratio change is the range of
weight change is limited, so the ratio never changes that much.

I have a second keyer IC (I almost said a taboo word) I have where we
changed the dots and dashes by the same percentage, keeping the ratio
the same, and adjusted the space between the dots and dashes to keep
the speed the same. It sounds OK also. The CW gets lighter and
heavier, and not "swinging". But again the range of weight control is
limited.

The only thing that sounds whacky, and doesn't adjust the duty cycle
without making the code sound like it is sent with an old side swiper
by a drunken telegraph operator, is changing the ratio. No one in
there right mind would want a ratio change, like my 706 Icom has.

So tell me Jan, which way of the two decent sounding ones do you think
sounds correct? Anyone else?

Is this documented anywhere? Or is it like S units?

73 Tom

850. these endless persoal wars

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: jack parr <parrfoo@sympatico.ca>
Message-ID: <39A2F687.C02D1CCD@sympatico.ca>
Source record: 181980

thank God for the "Skip the thread".
We would never get to see the real stuff on all these NG's which are for Hams & other nuts (Like Me!!!) who love messing around with ham gear.
Will some guru out there kindly work up a filter to dump ALL of these personals into the everlasting fire? We will put your name up in lights!!!

Disgusted

851. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a2f2c6.47438775@news.akorn.net>
Source record: 181981

On Tue, 22 Aug 2000 13:29:42 GMT, kk5yy@arrl.net (Gerald Schmitt)
wrote:

>The SGC tuner was so close to the base of the whip I sort of
>considered it base loaded, semantics. Heated up? that's
>news to me. Were you there? If so we didn't meet but I had
>to leave early to do my satellite demos.

Where did "heated up" come from? I don't get it.

The last thing you want to do is have shunt capacitance in an area
where the voltage is high. Using a tuner to feed a whip does just
that.

>>Ground losses swamp out changes in loss resistance in antennas. The
>>larger the vehicle you put the antennas on, the more the spread in
>>efficiency when ESR in the antenna is minimized.
>
>Woa Tom this was mounted on the same vehicle as several other test
>antennas. I would not have put that much credence in it myself had
>I not seen the results. I think I have to go with the observed
>results.

Hunh? You miss the point I think. For 40 meters and below:

If you placed an antenna with a fair amount of reactance in the
loading inductor in the middle of sixty 1/4 wl radials and compared
that system to an inductor with twice the Q, doubling Q would almost
cut losses in half. The inductor ESR dominates the system.

If you placed the antenna on a vehicle and doubled inductor Q in the
same antenna, the change would be barely or certainly much less
noticed.

If you placed an antenna on the radials and moved from near-base
loading to near-top loading, the change would be small and more
related to how the reactance required changed.

If you placed the same antenna on a vehicle and did the same change,
the change to top loading would be much more noticable.

As I said below:
>>The smaller the vehicle, the more important current distribution in
>>the antenna becomes.
>>
>>Hams that think large diameter coils offer optimum performance are
>>missing the boat. Even a #14 wire coil can have Q of around 300 in a

>>mobile, and the largest coils are lucky to reach 600. When the coil
>>requires a large amount of reactance, a long slender coil with smaller
>>wire can (and usually does) have more Q that a large diameter large
>>conductor inductor.
>
>I'll have to model this to convince myself all the work I have done
>seems to indicate wider is better (forgive me Pontiac) up to a
>point at least.

Give me an example please.

>Agreed but the discussion was Outbackers vs Hamsticks vs Hustlers.
>The Outbacker is not base loaded even using the 75M tap the effective
>coil is 1/3 of the way up the mast. The 75M Hamsticks seem to start
>the loading at that point also.

Comparing three marginally designed systems doesn't tell us anything
about how good any of them are.

>The most help for any of these type of antennas seems to come from
>proper base matching. I'm not talking about base loading but matching
>the impedance to the source.

Actuallt the biggest help is increasing the stinger or capacitance at
the top on the antennas, and using less inductance. Bandwidth gets
wider and efficiency higher.

A Hustler, with enough capacitance above the coil so the 20 meter
resonantor works on 40, is a real good 40 meter antenna.

The Hustlers problem is too much shunt C across the coil, and that
murders Q. The Hamstick and Outbackers problem is the small diameter
and small wire in the coil. All of these antennas have dielectric
materials surrounding the coil, which also reduces Q.

73 Tom

852. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a2f6b0.48441388@news.akorn.net>
Source record: 181982

On Tue, 22 Aug 2000 11:30:23 -0700, Cortlund Richmond
<crichmon@usa.alcatel.com> wrote:

>Jim
>
>I've never thoght this could be better than a plain wire. If you need a
>good RF ground up in the air, put down a metal sheet (foil is OK) big
>enough to have fairly good capacitance to free space. Then you can use
>that as the local RF ground at frequencies where the capacitance is a low
>impedance. This does not replace the power safety ground and static drain,
>which can be a direct run of the appropriate sized wire to a good ground
>per your building codes.
>
>Cortland

What I have done is roll up the carpet, and lay down aluminum foil
over a criss cross of brass or copper foil that forms the leads. I
guess you could use wire also. Then lay the carpet back down.

Does the trick for a RF ground, makes the whole room "cold" for RF.

73 Tom

853. Re: Dualband Base for Tree??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Frizz <senorpurpl@hotmail.net>
Message-ID: <8nutcj$k5m$1@bob.news.rcn.net>
Source record: 181983

Completely over looked freq range. I am looking for 2m/70cm.

K I 5 F J <jenjoeo@zianet.com> wrote in message
news:39a2ea27.0@oracle.zianet.com...
> If you can bury twelve 33 ft radials around the tree and run up a 33 ft
> wire a few inches away from the trunk you will have a better than average
40
> meter vertical that can be matched on other bands.
>
> K I 5 F J
>
> "Frizz" <senorpurpl@hotmail.net> wrote in message
> news:8nsl7p$bs0$1@bob.news.rcn.net...
> > What would be a small but decent dual or even tri band antenna for
hiding
> in
> > a tree? I really need one that is easy to get up in a tree and that is
> > easily hidden (ie nothing really big). What do you recommend and have
> used
> > in the past for stuff like this? I have antenna restrictions and have
> heard
> > many recommendations from hams on the air but have either forgotten the
> > model numbers or have not been able to find the antennas they are
talking
> > about. Any tips? Thanks!
> >
> >
> > KG4IVT.
> >
> >
>
>

854. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a2f7f7.48767924@news.akorn.net>
Source record: 181984

Orr is wrong, and he is doing a disservice to everyone by keeping that nonsense in his book.

On Tue, 22 Aug 2000 14:01:57 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Eb Laport says, the drivepoint resistance of a folded unipole with a >pair of identical conductors will be 4 times that of a similar straight >vertical antenna.

Drivepoint resistance is not directly related to efficiency or ground loss. I can make drivepoint resistance anything I like, and not change efficiency, when all I do is tap the source across different parts of the system with changing the common mode current toatals in the system.

>For instance, suppose we have a loss resistance of 13 ohms in series >with our antenna system. With a straight vertical, the drivepoint >resistance may be about 37 ohms, and with a power of 5000 watts (use >milliwatts if this offends your amateur radio sensitivity), our current >is 10 amps. Our loss is 1300 watts.

OK.

>With a folded unipole whose drivepoint resistance is 148 ohms, our >current is 5.57 amps into 161 ohms. Our loss is 404 watts in the same 13 >ohms.

Nope, you totally missed the boat. You simply split the current between two conductors. Since applied power is the same, and current the feedline sees is halved, the voltage must double. You have twice the voltage and half the current, so impedance seen by the feedline quadruples.

The other half of the system, the side connected to the ground system directly, has 5 amps in it. The side that passes through the feedline has 5 amps in it. They both tie to the ground system, so current in the ground system is 5 plus 5 or 10 amperes.

This assumes each conductor is equal size and shares equal current. If one is thicker than the other, it hogs more current so the rations can be different (and impedance transformation some value other than 4:1) but the sum of currents entering the ground will always equal the original current in the marconi feed system.

73 Tom

855. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39A3016C.8B0FDE8A@mwci.net>
Source record: 181985

Leland C. Scott wrote:

> "William E. Sabin" <sabinw@mwci.net> wrote in message
> news:39A26B99.C6270C1F@mwci.net...
> > The Mathcad 2000 version has some extra features that are not important
> for
> > me, so I will not upgrade, but I would recommend it as an initial
> purchase.
>
> The only problem with not upgrading is the worksheets are not fully
> backwards compatible with earlier versions, even if they are saved as a
> prior version.

If I disseminate a Mathcad worksheet, like in an article, I make it as generic and simple as possible so that the most basic versions can be used. If there is a version conflict the reader can easily type in the material using his own version.

Bill W0IYH

856. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A31517.37B8@bellsouth.net>
Source record: 181986

Tom,

I think that larger dia. wire and larger coils DO have higher Q---up to a point. Small dia coils with smaller wire and closely spaced turns are often lossy. When you get over about 4" coil dia., you have passed the point where return begins to diminish. Some of those "monster" coils DO have high Q, BUT that efficiency works against itself in that they become so sensitive to their surroundings that one would be just as well off with the smaller coils you mentioned. These coils, at least the bug catcher types, because of their fixed tuned characteristics, cannot respond to the changes in their environments (such as a screwdriver can), and can be put out of resonance merely by moving the vehicle a few feet from where the tap was installed. I see some of these HUGE bugcatchers at hamfests and wonder how the operators can get any results at all when under way.

My screwdriver is like Henry Allen's Texas Twister--3" diameter and about 9 feet long fully extended (13' from ground). Whip is 60" long. I wish we could have some nearby tests so I could see how mine works against some other types. I mean, when you make something, nice to see how one compares.

Jerry
K4KWH
Hams that think large diameter coils offer optimum performance are
> missing the boat. Even a #14 wire coil can have Q of around 300 in a
> mobile, and the largest coils are lucky to reach 600. When the coil
> requires a large amount of reactance, a long slender coil with smaller
> wire can (and usually does) have more Q that a large diameter large

857. Re: multiband inverted L question..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8nv6cf$2jl$1@slb2.atl.mindspring.net>
Source record: 181987

Hey, you guys are good... heh, heh, ha, hah...

Dean and Jerry, Oliver and Hardy, Rowan and Martin, the Smother's Brothers,
got nothing on Tom and Peter...

Go for it...

ROFL...

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Peter Bertini <commquart@erols.com> wrote in message
news:8npd58$875$1@bob.news.rcn.net...
> Well Tom, I checked your webpages for the Big-T Flyer, and I couldn't
find
> it.
> Draw me up something on a napkin. I do want to build one.
>
> Peter
>
> Tom W8JI <2w8ji@contesting.com> wrote in message
> news:39a02449.34248340@news.akorn.net...
> > On Sun, 20 Aug 2000 13:19:16 -0400, "Peter Bertini"
> > <commquart@erols.com> wrote:
> >
> > >The only remaining question is if one value of L will provide a proper
> match
> > >for bands where the antenna is used as a T. I
> > >suppose changing L values is as simple as grounding a "Tap" placed on
the
> > >coaxial winding shield at the proper inductance..
> >
> > If you want to build one, I'll help you. Then you can wrirte a nice
> > article about it, so others can build one.
> >
> > Let's call it the big "T" flyer.
> >
> > 73 Tom
>
>

858. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8nv6t2$758$1@slb1.atl.mindspring.net>
Source record: 181988

Hey....

ROFL....

I'd like to get some of that ethic inculcated into me too.... maybe my Ford would run better on ethic.

Doesn't ethic have something to do with not being misleading in word and deed... or is it a gasoline additive?

I was inoculated for smallpox, but for ethnicity?

Why doesn't someone tell Chip to "give it up", we all know he went to an Ivy League School? He's told us at least 50,000 times.

He knows all of the 50 cent words, but can't string them togther in a manner that any simple sailor could understand! What?

Inculcated ethic into me!!! How about, "my folks taught me right from wrong".

Or... they taught me that it is unfair to "bait and switch" or, "don't tease others", or "be direct and answer questions forthrightly", or....

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
sideband <sideband@cac.net> wrote in message
news:39a1c2d5.77077366@news.cac.net...
> I think he must use an online thesaurus or something...
>
> -SSB
>
> On or about 21 Aug 2000 23:48:09 GMT, fractenna@aol.com (Fractenna),
> using the forum rec.radio.amateur.antenna blathered:
>
> :>> Fractenna wrote:
> :>> I am here to enjoy myself and provide accurate and cogent info. As
long as
> :>I am
> :>> capable of this, I am happy to be here.
> :>
> :>If you were capable of only providing accurate and cogent info, and none
> :>of the rest, everyone else would be happy you were here too.

> :>
> :>ac6xg
> :>
> :
> :That is what I do Jim; it comes from years of training and experience--as
well
> :as a strong ethic inculcated into me from childhood.
> :
> :73
> :Chip N1IR
>

859. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39a30d54.1637554@news.mcn.org>
Source record: 181989

On Tue, 22 Aug 2000 17:16:44 GMT, "M1nn0w" <1c3d0g@att.net> wrote:

>I posted this question under another topic but never got an answer. I 'll
>try again.
>Can one use Ladder line on a Aluminum sided house with storm
>windows???? I understand that the desire is to keep the line away from metal
>whenever possible.
>Perhaps the question is dumb but I'm really interested as I'd like to run a
>Long Wire outside
>but getting back into the house seems like it might be a problem????????
>
>
The phrase keep away from conductive surfaces without stating how far
has had many think that it requires a great distance..

It is recommended that you maintain a distance of about 2ï¿½ to 3 times
the center to center of the conductors of the ladder line..

For example, the popular (so called) 450 window line has a 0.8"
spacing. Therefore keeping it 2ï¿½ -3" or so away from conductive
surfaces is enough.

Hope this helps

73
Danny, K6MHE

860. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39a40ea7.1976477@news.mcn.org>
Source record: 181990

On Tue, 22 Aug 2000 15:06:18 GMT, "Floyd Sense"
<sentek@sprintmail.com> wrote:

>I'm currently sealing connectors with a Teflon foam (sold by AES - forgot
>the brand name) that is supposedly used in the cable TV industry. You fill
>up the PL-259 shell with the stuff from a squeeze tube, and then screw the
>connector together. It fills all the voids and even seals the thread.
>Haven't taken any of the joints apart yet, so don't know how it holds up
>over time.

Yes, but don't try it on 9913!

Danny

861. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: ZZZjim_cronin@juno.comZZZ
Message-ID: <cf86qs4j1bd51v8n6crjdiug23h6ta89bp@4ax.com>
Source record: 181991

A local fellow tuned me in on how to waterproof connectors:

Wrap with rubber tape. Use some tension and overlap.
Wrap that mess with Scotch (3M) electrical tape.

I recently took down an antenna that was up 3 years and
the connectors were still shiny.

73,
Jim
N2VNO

On Sat, 19 Aug 2000 03:17:44 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>Roger Halstead (K8RI) www.RogerHalstead.com
>>
>> If you want it REALLY, REALLY waterproof, squeeze some silicone seal onto
>the
>> connector, then shrink sleeve over that. Make sure that you shrink it
>from the
>> center out to the edges and that some silicone "bleeds" out the end of the
>> sleeving where it goes over the coax. It will take a knife and an
>afternoon to
>> ever get it apart again, but it is guaranteed waterproof for life.
>
>Couple of items.
>If the silicon seal smells like acetic acid? It's the corosive stuff.
>Don't put it in contained areas.
>Where I used to work we purchased a whole bunch of transducers potted in the
>stuff inside cast aluminum boxes.
>
>About a year later they started going bad.
>Sure enough, when we started takeing them apart we found that most of the
>foil was gone from the boards. Well over $20,000 down the drain plus labor
>which made the $20,000 look like chicken feed.
>
>Get the stuff that "stinks", but not the black stinky stuff as it is
>conductive.
>
>I believe both GE and Dow Corning make the non conductive stuff as well as
>the regular. I know DC does as I worked for them well over 30 years. That
>is why I also know that if it smells like acetone it's corosive.
>
>I use DC-4 compound and fill the connector, then like Jim, I head the shrink
>tubing from the center out. Actually I do each end first, then move to the

>center and work out and use a piece of tubing about five to six inches
>long.
>
>I have used the "bathtub calk" which is usually corosive and had it eat the
>plating right off the connectors. (smelled like acetone)
>Also, that stuff cures by moisture so if it cures inside the connector
>within a few days you can be certain that the connector was not moisture
>proof, or well sealed, heat shrink tube, or not. Then again, the silicon
>rubber (such as Silastic RTV @) is water proof, but not moisture proof.
>
>But...As I said, it is water proof and will keep salt out as well.
>>
>
>I've even used the bathtub calk to seal coax to dipoles and it turned green
>where the stuff contacted the copper wire. Course out there and with heavy
>wire it's not really a problem, but finer wires, solder, and foil in
>contained spaces are bad news.
>
>Roger (K8RI)
>
>> Jim
>> Jim Weir, VP Eng. RST Eng. WX6RST
>> A&P, CFI, and other good alphabet soup
>

862. Re: Verticals and trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A32200.D0A52260@oio.net>
Source record: 181992

Bruce Winkelman wrote:
>
> After 2 brief, disastrous affairs with verticals from GAP and Moseley, I
> have decided to return to my first vertical love, the Butternut. A tower
> and beam, however desirable, is not possible at present. Hope to put up a
> new Butternut, either the HF2V or HF6V before the first of October. My old
> vertical mounting pipe has moved closer to trees than it was 15 years ago
> (the trees grew and new ones planted). If I reuse the old pipe mount, the
> vertical will be within 3 feet of branches on the west side of the yard and
> within 15 feet of branches to the northeast. Should I worry about the
> proximity of the trees? What effect will the trees have at HF? Should I
> just forget about it and have fun? Any advice, suggestions, experiences
> greatly appreciated.
> Bruce Winkelman AA5CO Tulsa, OK

Bruce,
Near by object will affect any antenna. How much?? Who knows
till you try it. It's always best (if possible) to get as far
into the open as you can. If 3' or 15' is as far away as you can
get...go for it.
'Doc (in "Big Mac")(outside looking in!)

863. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: John LeMay <jlemay@nospam.njmc.com>
Message-ID: <20000822.211900.3599@logan.njmc.com>
Source record: 181993

In article <Yt2fOTah25IfAz2lvw10nNI7ZZmP@4ax.com>, Bob Miller
<bamiller@texas.net> wrote:

>
> My most serious suggestion would be to invest 30 dollars or so in either
> the ARRL Radio Amateur's Handbook, which has several chapters on antenna

Here's a question - how often do folks think these books should be
updated? I'm still using my 1994 Radio Amateur's Handbook. Has much
changed? Enough to warrant a new copy?

864. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13841-39A331D3-84@storefull-118.iap.bryant.webtv.net>
Source record: 181994

Roy wrote:
"Consequently, the loss is the same as before."
Reg wrote: "Folding does nothing more than multiply the unfolded feedpoint resistance by four. The feedpoint resistance is radiation + loss resistance."

Nice to see them agree!

From Arnold Bailey, the radiation is identical from the 1/4-wave vertical or from the folded unipole. So, lossless antennas have the equivalent of equal total currents in their elements.

Roy wrote:
"So the bottom of the source is connected to the bottom of the other monopole conductor, and the combination is connected to the Earth through 13 ohms. An easy way of looking at what happens is to observe that the current is now half of what it was with the unfolded unipole."

My schematic has 13 ohms in series with the transmitter output. I did not consider any significant loss in the antenna elements themselves.

In the case of a 1/4-wave straight vertical, I had a 50-ohm total load.

In the case of the folded unipole, I had a total load of 161 ohms.

Each load has the same 13-ohm loss resistance in the circuit. The loss is a part of the total resistance in each case.

(I squared)x(Rloss) for the 1/4-wave straight vertical is 10 amps squared times 13 ohms = 1300 watts.

(I squared)x(Rloss) for the folded dipole is 5.57 amps squared times 13 ohms = 404 watts.

The advantage of higher impedance is lower power loss for the same power transmission. It`s why audio isn`t distributed at 8 ohms, and it is why electrical power isn`t transmitted at 110 volts over long distances. The same loss resistance would rob circuits of a higher percentage of the power at a lower transmission voltage to current ratio.

Best regards, Richard Harrison, KB5WZI

865. Re: Longwires

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A33C5E.620AC0F6@eznec.com>
Source record: 181995

I believe that the ARRL policy was, and may be still, to rewrite roughly 20 percent of the book every year. If this is still the practice, every 5 years or so would be a reasonable interval. Of course, during that time some sections would be rewritten more than once and some not at all. At times, they've done a complete rewrite and/or reorganization of the whole volume at once. This happened with both the Handbook and Antenna Book some years ago. As I recall, the Handbook was done some time between about 5 and 10 years ago, with various sections and chapters being written by different authors. The Antenna Book was completely redone by Jerry Hall at around the 14th or 15th Edition. (The thickness about doubled, so it's easy to tell old ones from new.) I heartily recommend getting one of the later Antenna Books if you've got a pre-rewrite one.

Particularly in the case of the Handbook, the content changes as the technology changes, so people often find it useful to have several editions, if they work with technologies of different eras or deal with older equipment. The projects also change from year to year, so this is another reason some might choose to have more than one.

Roy Lewallen, W7EL

John LeMay wrote:
>
> In article <Yt2fOTah25IfAz2lvw10nNI7ZZmP@4ax.com>, Bob Miller
> <bamiller@texas.net> wrote:
>
> >
> > My most serious suggestion would be to invest 30 dollars or so in either
> > the ARRL Radio Amateur's Handbook, which has several chapters on antenna
>
> Here's a question - how often do folks think these books should be
> updated? I'm still using my 1994 Radio Amateur's Handbook. Has much
> changed? Enough to warrant a new copy?

866. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A33F2F.7128EE5B@eznec.com>
Source record: 181996

Richard Harrison wrote:
>
> Roy wrote:
> "Consequently, the loss is the same as before."
> Reg wrote: "Folding does nothing more than multiply the unfolded
> feedpoint resistance by four. The feedpoint resistance is radiation +
> loss resistance."
>
> Nice to see them agree!
>
> From Arnold Bailey, the radiation is identical from the 1/4-wave
> vertical or from the folded unipole. So, lossless antennas have the
> equivalent of equal total currents in their elements.

Yes. One half is in each wire.

> Roy wrote:
> "So the bottom of the source is connected to the bottom of the other
> monopole conductor, and the combination is connected to the Earth
> through 13 ohms. An easy way of looking at what happens is to observe
> that the current is now half of what it was with the unfolded unipole."
>
> My schematic has 13 ohms in series with the transmitter output. I did
> not consider any significant loss in the antenna elements themselves.

The dominant source of loss in a ground-mounted monopole system is ground loss, which does not appear in series with the transmitter, but at the connection(s) betweeen the antenna and ground. This is the model I used. If ground loss isn't a factor, a monopole, either folded or unfolded, would be so close to 100% efficient (unless extremely short) as to make it not worthwhile to consider loss at all. I can't think of any significant cause of loss in a real monopole which can be reasonably modeled as being in series with the source. You could, of course, refer the ground loss to the feedpoint. If you do, you find that it's transformed by the same factor as the antenna impedance. That's basically what I did in my detailed analysis -- you'll recall I ended up with 5 amps -- the source current -- going through two 26 ohm resistors. You can refer the 13 ohms of ground loss to the feedpoint as a 4 X 13 = 52 ohm resistor, have the source current of 5 amps flow through it, and get the same result. You get the same result with any valid analysis technique.

> In the case of a 1/4-wave straight vertical, I had a 50-ohm total load.
>
> In the case of the folded unipole, I had a total load of 161 ohms.

>
> Each load has the same 13-ohm loss resistance in the circuit. The loss
> is a part of the total resistance in each case.
>
> (I squared)x(Rloss) for the 1/4-wave straight vertical is 10 amps
> squared times 13 ohms = 1300 watts.
>
> (I squared)x(Rloss) for the folded dipole is 5.57 amps squared times 13
> ohms = 404 watts.
>
> The advantage of higher impedance is lower power loss for the same power
> transmission. It`s why audio isn`t distributed at 8 ohms, and it is why
> electrical power isn`t transmitted at 110 volts over long distances. The
> same loss resistance would rob circuits of a higher percentage of the
> power at a lower transmission voltage to current ratio.
>
> Best regards, Richard Harrison, KB5WZI

Your analysis is correct if you've put a 13 ohm resistor in series with your source. But not if the 13 ohms is ground system loss. Your analysis isn't for an antenna mounted on a ground system having 13 ohms of resistance. It's for an antenna with a 13 ohm resistor added in series at the feedpoint. For your antenna model, your analysis is correct. But I doubt many people are interested in the efficiency of that system.

How do you get 13 ohms of loss in series with the source in a real antenna without purposefully adding a resistor?

Roy Lewallen, W7EL

867. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A3645F.98420EAF@eznec.com>
Source record: 181997

Roger Halstead wrote:
> . . .
> I in 9913 type cables I use the "Dielectric Grease" and fill the connector.
> That sutff is good, unfortunately it is both difficult to find and
> expensive.
>. . .

The "dielectric grease" I've seen is a silicone grease. I know plumbers use silicone grease for lubricating seals -- have you or anyone tried getting it at a plumbing shop?

It's also used for lubricating O-rings, so some industry which would have a need to do this should also have a source.

I'm still using a large tube of the stuff I got somewhere surplus about 30 years ago. A little goes a long way! But I haven't used it to fill connectors.

Roy Lewallen, W7EL

868. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39A3754B.323AB1DF@haertig.com>
Source record: 181998

Silicone grease is also the standard Food Grade lubricant.

Gray

Roy Lewallen wrote:
>
> Roger Halstead wrote:
> > . . .
> > I in 9913 type cables I use the "Dielectric Grease" and fill the connector.
> > That sutff is good, unfortunately it is both difficult to find and
> > expensive.
> >. . .
>
> The "dielectric grease" I've seen is a silicone grease. I know plumbers
> use silicone grease for lubricating seals -- have you or anyone tried
> getting it at a plumbing shop?
>
> It's also used for lubricating O-rings, so some industry which would
> have a need to do this should also have a source.
>
> I'm still using a large tube of the stuff I got somewhere surplus about
> 30 years ago. A little goes a long way! But I haven't used it to fill
> connectors.
>
> Roy Lewallen, W7EL

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

869. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:02:03 UTC
From: sideband@cac.net
Message-ID: <39a1c2d5.77077366@news.cac.net>
Source record: 181933

I think he must use an online thesaurus or something...

-SSB

On or about 21 Aug 2000 23:48:09 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna blathered:

:>> Fractenna wrote:
:>> I am here to enjoy myself and provide accurate and cogent info. As long as
:>I am
:>> capable of this, I am happy to be here.
:>
:>If you were capable of only providing accurate and cogent info, and none
:>of the rest, everyone else would be happy you were here too.
:>
:>ac6xg
:>
:
:That is what I do Jim; it comes from years of training and experience--as well
:as a strong ethic inculcated into me from childhood.
:
:73
:Chip N1IR

870. R7 Help!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 00:20:43 UTC
From: airwavesmith@aol.com
Message-ID: <20000821202043.25686.00000596@ng-fz1.aol.com>
Source record: 181934

Looking for an R7 installation literature or manual. Will pay for shipping
too.
Please e mail at airwavesmith@aol.com

871. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 01:26:52 UTC
From: cathexis@erols.com
Message-ID: <39a1d56d.251059397@news.erols.com>
Source record: 181935

On Mon, 21 Aug 2000 23:45:19 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>On Mon, 21 Aug 2000 15:18:28 GMT, cathexis@erols.com (Set'em up Joe)
>wrote:
>>
>> I've definitely identified a major source of RFI:
>>It's 1310 WDCT, a all Korean AM BC station. It's small,
>>only 5Kw I think. But it's offices are only a mile from my
>>house, though I haven't spotted a tower as yet. I can
>>definitely hear harmonics spilling over at least from
>>200 Khz approx. up into the 160M band. Awful!!
>
>Andrew,
>
>I came into this late. I've turned in a dozen AM BCB stations with
>problems, and some "busts" have made national press.
>
>You peaked my interest because about a year ago I turned in a Korean
>AM BC station in the Meadowlands in NJ. It was mixing with a
>transmitter from WBBR in the Meadowlands, and coming out on 1830 kHz.
>The mixing was in the Korean programming stations transmitter.
>
>The FCC got them to correct the problem, after a visit.
>
>I'm curious where you live, and hope the transmitter is not the same
>one back to the same tricks. Clue me in, what city are you in?
>
>I'll listen from here, and see what I can hear. I can hear a few
>milliwatts of signal on a quiet night even from a thousand miles away
>on 160 meters, because I have very large arrays for receiving. I'm in
>middle Georgia.
>
>73 Tom

Big THX to all. Both I and 1310 WDCT are located in
Fairfax City, VA. 22030. I've taken down the antenna (See,
"Project Skywire, No More", new post). Still, there's a new wire
up and so I'd like to finish this thread properly. First of all, I'm a
newbie and don't know what my rights are re: other peoples'
RFI. What do you mean about going after this AM BCB station?
I need some background here, please.

Tom, email or post here if I can give you any helpful info
on this station.

Thanks,

Andrew
KG4JBM

872. Project Skywire: No More!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 01:55:01 UTC
From: cathexis@erols.com
Message-ID: <39a1d6de.251428078@news.erols.com>
Source record: 181936

Greetings,

That's right; 24 hours after I put it up I took it down.
Reason? The east leg of wire was barely over the roof and
worse, 10ft. from my power line. Though trees were good,
no insulators or tie-offs were used and I felt this posed an
un-acceptable risk. Had that leg of the circuit snapped the
only place it could have gone is sliding off the roof to drape
on the power lines. I refused to take that chance.

But,.....Now there's a new wire! Haven't even really
checked it out yet. Will have to see about previously mentioned
BCB RFI. There are pluses and minuses to this wire. First it's
no loop, just a random wire. Only 130ft. approx, not the 200ft.
of earlier one. One nice advantage: Height! Whereas the pre-
vious wire probably averaged 30-40ft. This new one came from
some *really* lucky slingshots that sent my fishing weight into
genuine tree tops. Avg. height now: Never less than 50ft,
with a third of the length approaching 80ft plus.. Yumm!
That's just about all the up I've got <grin>.

I would like to ask the ng for some advice. I still have
well over 60+ feet of wire (more if I splice) and two huge trees
well placed at same heights but,..... This means turning a "L"
shaped random wire into either a "J" or something very close
to a Right Triangle-- depending on how far I bring the wire
back to close the circuit. Still, I've read and heard talk of how
anything that gets to be a "folded dipole" will actually LOSE
gain. If I put up more wire I would get perhaps another 70-
80 ft. in length and maintain same good altitudes. Thoughts?
Reasons for your thoughts?

Again my thanks,

Andrew
KG4JBM

873. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 02:02:40 UTC
From: k9sqg@aol.com
Message-ID: <20000821220240.22580.00000956@ng-fj1.aol.com>
Source record: 181937

The issue has to do with the fact that the loop is a shorted loop at DC potentials and polarization comes into play also. Much man-made noise is vertically polarized and that is why the vertical has more noise in many instances (mine included).

My tests were conducted with stations at virtually every direction on the compass so it is not a matter of directionality as far as I can interpret.

There are numerous references regarding the characteristics of the loop based upon computer modeling, antenna range tests, and empirical data collected at various ham locations. For the interested parties, just send me an email and I will compile a listing of the authors and articles. If it would be helpful, I can copy the articles and send them out.

The antenna patterns I've seen for loops differ somewhat from a dipole and do experience some degree of gain over a dipole depending on the elevation angles, height above ground in terms of wavelength, ground conductivity, etc. There are too many variations to expound on in narrative form so I'd be happy to copy the plots from the models too.

Note that I merely wanted to convey what I have read and what my tests have indicated. Others might have different experiences due to local conditions. In any case, antenna experimenting can be fun.

73

Evan

874. re: HyGain Hy-Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 02:15:27 UTC
From: kb0ksa@aol.com
Message-ID: <20000821221527.24460.00000677@ng-ci1.aol.com>
Source record: 181938

Hi Gang,
Just got part of a Hy-Tower. I think its the first model. I need the specs to

make the missing parts and get the old 80m thur 10m Vert up and running.
I'm willing to pay reasonable copy and mailing cost.
Tnx for all your help...73s...John

875. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 02:50:31 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <8nsppnhpg1@news.hawaii.edu>
Source record: 181939
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

>> I should note that I don't want to buy a soldering iron (due to the

Then purchase a soldering gun, Jason. It has a spring-loaded finger switch -- as soon as you release your finger, the power to the heating element is shut off.
Jeff KH6O

876. Re: R7 Help!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 03:17:27 UTC
From: Tom Branch <t.branch@gte.net>
Message-ID: <bhmo5.2789$Xl5.349505@dfiatx1-snr1.gtei.net>
Source record: 181940

Airwave,

Go to http://www.cushcraft.com and download it for free.

73 de Tom, K4NR

Airwavesmith wrote in message
<20000821202043.25686.00000596@ng-fz1.aol.com>...
> Looking for an R7 installation literature or manual. Will pay for
shipping
>too.
> Please e mail at airwavesmith@aol.com

877. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 03:26:25 UTC
From: jherrero@videotron.ca
Message-ID: <39a4ec42.365810666@news.videotron.ca>
Source record: 182118

On Sun, 20 Aug 2000 18:28:30 -0500, "gcouger"
<gcouger@NoXSPAM.mercury.rfdata.net> wrote:

>Juan,
>
>A GPS will give you a better time signal. A Rockwell Jupiter puts out a 1
>second pulse, a 10Khz
>pulse and spits out the time in ASCII every second.

Yes. I love those GPS.
But for now. The accepted method of timing scientifically meaningful
events. Is to stick a videocam on your telescope, and videotape the
event while feeding the UTC radio broadcast to the audio track. Some
amateurs are working on an interface circuit that will insert the GPS
time signal on the video frames. But until they succeed (and then
again). Hundreds of astronomers around the world will continue to use
short-wave radios to record their measurements.

Thanks
Juan Herrero
Astronomy In The Great White North
http://pages.infinit.net/jherrero/

878. Buutternut H9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 03:48:34 UTC
From: Pete <Pete@xyz.com>
Message-ID: <mKmo5.13606$ZI2.813504@news1.rdc1.il.home.com>
Source record: 181941

I am going to ground mount my antenna. The question I have is, do any of you know if there is a
tilt-over bracket I can buy for this vertical? We have restrictions in our subdivision and I would like to hide the antenna when not in use. Thanks for your information.

879. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 04:19:09 UTC
From: kk5yy@arrl.net
Message-ID: <39a3faa4.260075294@nntp.mindspring.com>
Source record: 181942

On 21 Aug 2000 11:14:43 GMT, n8blk@aol.com (Art Clemons) wrote:

The Outbacker data you cite is an absolutely worst case scenario for
the Outbacker and it did in fact beat a loaded CB 1/4 wave antenna.
.
The Outbacker tested was on a mag mount with no attention paid to base
matching and/or grounding. Reasonable match to the transceiver was
accomplished by the loss due to capacitive matching to the body of the
small imported rental car.

You can gain a bit by grounding an Outbacker and matching the load.
It's pretty much the same as a Hustler or Hamstick. As you can see
from the results you just don't get there on 75 until you get a center
mounted coil of some reasonable diameter.

The most interesting thing of the lot was the stainless steel coil
bugcatcher. It was very much a copy of the 480 coil that Henry
Allen makes but in stainless. Guess that makes a case for
ohmic losses and efficiency.

>

>CAPACITY HATS: These antennas had capacity hats of some sort for top loading.
>
>K7POF - BOB 64.8 (lST RUN) 65.1 (2ND RUN LATER IN THE DAY)
>W6MMA - VERN 64.9
>W6RCA - CECIL 64.9
>N6BT - TOM 63.8 (lST RUN) 64.8 (2ND RUN) 66.0 REAR ASPECT
>K6SDQ - JIM 63.2
>KE6DM - BOB 63.0
>K6MB - JAY 59.2
>
>BUGCATCHER TYPE: Whip only, no top hat.
>
>K7POF - BOB 63.2
>WA6JPR - WALLY 62.3
>WB6HOK - BART 61.7
>K6MB - JAY 60.4
>W6RCA - CECIL 58.3
>W6JEO - CARL 57.7
>W5GYJ - JIM 57.2
>KC6MAJ - PETER 52.7
>WB6ZJA - JIM 51.9
>
>SCREWDRIVER TYPE: Various manufacturers
>

>KE6ELQ - FRANK 64.3 DOES NOT MEET VEHICLE CODE - 20' TIP TO GROUND.
>W6MMA - VERN 63.2
>K6RCL - DENNIS 62.6
>WA6HEY - JAKE 62.1
>K7EZ - ROGER 61.9
>KA6TAY - GREG 61.8
>
>OTHER:
>W6YY -SANFORD 66.7 DOES NOT MEET VEHICLE CODE - 30ft ANT, TOP OF MOTORHOME
>
>WA6JPR - WALLY 61.1 BANDHOPPER
>WA6JPR - WALLY 59.5 BANDSPANNER
>WA6JPR - WALLY 58.3 STAINLESS STEEL FORTEX COIL
>KK5YY - GERALD 56.4 ROOFTOP MOUNTED OUTBACKER WITH TRIPLE MAGNET MOUNT
>W6RCA - CECIL 52.2 11.5' WHIP (NO COIL)
>
>ADDITIONAL DETAILS:
>
>CAPACITY HATS:
>
>K7POF - CENTER-LOADED, LARGE CAPACITY HAT, WIRES TO FRONT.
>W6MMA - BBS SCREWDRIVER, 5' HAT WITH 18 RADIALS, R. FRONT BUMPER.
>W6RCA - HOMEBREW MID-BACK BUMPER, OVER THE VEHICLE,TOWARD FRONT.
>N6BT - FORCE TWELVE PLUMBER'S DELIGHT ALL AROUND VEHICLE.
>K6SDQ - CENTER-LOADED WITH 42" HAT @ 11 ABOVE COIL. LEFT REAR.
>KE6DM - CENTER-LOADED MID-BACK BUMPER 17" HAT.
>K6MB - LEFT, REAR MOUNT, CENTER-LOADED WITH TWO WIRES TOWARD FRONT.
>
>BUGCATCHER:
>
>K7POF - MASTER MOBILE, LEFT REAR, 7011 BASE, 64" WHIP.
>WA6JPR - BUGCATCHER, MID-BACK BUMPER MOUNT. (NO PAPERWORK)
>WB6HQK - 5.25 INCH DIA COIL ON 2.5 FOOT MAST MOUNTED ON TONNEAU COVER, 72 WHIP
>K6MB - BUGCATCHER, LEFT REAR.
>W6RCA - TRAILER HITCH MOUNT, 3' BASE, 6X6" COIL, 5' TOP.
>W6JEO - BASE-LOADED, 2x12" COIL, 62.511 TOP, 3.5' GND TO BASE.
>W5GYJ - BASE-LOADED, 8x12" COIL, 7' TOP, 3' GND TO BASE. (GLA COIL)
>KC6MAJ - CENTER-LOADED, ON TRUNK, 3X5" COIL. (HUSTLER COIL)
>WB6ZJA - TEXAS B.C. LEFT ABAFT CAB MOUNT, 16"-HAT 12" ABOVE COIL.
>
>SCREWDRIVER:
>
>W6MMA - AS ABOVE SANS HAT.
>K6RCL - HIGH SIERRA 1000, CNTR-LEFT MOUNT, GMC P.U.
>WA6HEY - W6AAQ ANT., REAR, LEFT MOUNT @ 43" GND TO BASE.
>K7EZ - W6AAG ANT., REAR MOUNT, 36" GND TO BASE.
>KA6TAY - HIGH SIERRA, CNTR REAR BUMPER MOUNT 16" GND TO BASE.
>
>OTHER:
>

>WA6JPR - BANDHOPPER.
>WA6JPR - BANDSPANNER.
>WA6JPR - STAINLESS STEEL.
>KK5YY - OUTBACKER,CNTR-ROOF, MAG-MOUNT.
>W6RCA - 11.5' WHIP (NO COIL) TRAILER HITCH MOUNT.
>
>Additional Notes:
>
>KC6MAJ and WB6ZJA apparantly had grounding problems and the results are
>not typical of similar installations.
>
>These are the final results but updates may occur as additional information
>becomes available. If you have any additional information or errors to
>report, please let me know.
>
>If you have any questions please feel free to email me: bart@wb6hqk.ampr.org
>
>If you're on the west coast, many of those involved can often be found
>on 3850 kHz from 0730 to 1000 and 3995 kHz from 1700 to 1800 PDT. We would
>like for you to join us!
>
>bart wb6hqk
>
>-art clemons-

880. Re: Wire antennas: free lunch?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 06:59:05 UTC
From: "J. Simons, PA0SIM" <jmsi@oce.nl>
Message-ID: <39A224B9.A21146A3@oce.nl>
Source record: 181943
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Tom W8JI wrote:
>
> On Sun, 20 Aug 2000 12:34:59 -0400, "Tom Wagner - N1MM"
> <tomwagner@mindspring.com> wrote:
>
> >Just so I'm sure I have it right, 100% weight is no time off
> >and 0% weight is no time on. At 33% weight, the dots would
> >be separated by an off period twice as long as the on period.
> >
> >I.e. weight = dot length / (dot length + space between dots length)
> >
> >73,
> >Tom
>
> I think you have it. Dot rate is constant. But the dots and dashes
> extend (but keep the same ratio between each other to fill in the
> spaces).
>
Tom, I am a little confused.

33% weight makes the dots 2/3 of the original length.
If dashes are/stay 3 times the dots, then
dash length = 3 * (dot length * 2/3) = 2 * dot length?

A weight of 67% makes a dot twice as long as the off period.
So the dot becomes 4/3 times its original length.
dash length = 3 * (dot length * 4/3) = 4 times dot length?

In the last example dashes fill up a full space.
The spaces between dots and between dashes are not the same.

As far as I understand the dashes are shortened or extended the
same amound of time as the dots.
As a consequence the ratio between them is not constant.

As you said Tom:
> In early keyers, that was accomplished by changing the threshold
> point of a triangle wave triggering system.

73 de Jan PA0SIM.

881. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-22 23:12:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8nv1c2$ai7$1@neptunium.btinternet.com>
Source record: 181999

You are all making a song and dance about the (John Cleese) bleeding obvious. Some of you might be trying to make a living out of it. Good luck to you !

The radiating efficiency of a 1/4-wave folded monopole is exactly the same as a 1/4-wave simple monopole, regardless of the base-ground connection-loss resistance. Folding does nothing more than multiply the unfolded feedpoint resistance by four. The feedpoint resistance is Radiation + Loss resistance.

Instead of folding it is quite feasible to use 3 conductors in parallel and feed only one. The feedpoint resistance is then 9 times the simple 1/4-wave vertical or roughly 330 ohms.

But the radiating efficiency of the system remains unchanged.

There's no such thing as a free lunch.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Richard Harrison <richardharrison@webtv.net> wrote in message
news:13841-39A2CE25-32@storefull-118.iap.bryant.webtv.net...
>
> In this newsgroup Roy Lewallen recently faulted Bill Orr for a claim
> that the folded unipole could be less lossy than a straight vertical
> antenna, after I said you could probably rely on Bill Orr.
>
> After 40 years, I again have a copy of Laport`s "Radio Antenna
> Engineering", and it`s good.
>
> Eb Laport says, the drivepoint resistance of a folded unipole with a
> pair of identical conductors will be 4 times that of a similar straight
> vertical antenna.

>
> For instance, suppose we have a loss resistance of 13 ohms
in series
> with our antenna system. With a straight vertical, the
drivepoint
> resistance may be about 37 ohms, and with a power of 5000
watts (use
> milliwatts if this offends your amateur radio
sensitivity), our current
> is 10 amps. Our loss is 1300 watts.
>
> With a folded unipole whose drivepoint resistance is 148
ohms, our
> current is 5.57 amps into 161 ohms. Our loss is 404 watts
in the same 13
> ohms.
>
> 404 watts is less than 1300 watts, thus it is possible to
reduce antenna
> system loss by using an antenna whose drivepoint
resistance is a larger
> fraction of the total system
>

882. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <21665-39A442D4-75@storefull-113.iap.bryant.webtv.net>
Source record: 181769

Roy Lewallen wrote:
"I only said that the current into one terminal has to equal the current out of the other,"

No argument with that as a steady-state statement. There is no long-term storage in an inductor.

I was challenging the statement "The currents at the terminals of an inductor are in phase."

An "ideal inductor" has zero resistance (don`t know about zero size) and not only opposes current as described by Lenz`s law, but delays current flow.

In a purely resistive circuit, the current is in phase with the voltage. If purely inductive or capacitive, the current in a circuit lags or leads the voltage by an angle of 90 degrees. If inductance is in series with resistance, the current lags the voltage by an angle whose tangent is X over R.

What is the function relating current in and out of the inductance? The current in the circuit is the voltage divided by R + JX.

The function of current out versus current into a perfect inductance is that no delay happens in the resistance (even if there were some) it is all in the inductance. There is a delay of 90 degrees in a purely inductive circuit. There is zero delay beyond wave propagation time in a in a purely resistive circuit with zero inductance.

Delay is obvious when d-c is applied to an inductance. Put one volt across a one henry tnductor with one ohm total series resistance, and in one second the current will have risen exponentially to 63% of its final value of one amp. The time constant is proportional to L over R. (If the same one-ohm circuit had a coil of two henries inductance, it would take 2 seconds to get an increas up to 0.63 amp through it) T, the time required to reach 63% of the resistance limited current through the circuit, is a function of L/R, as said above.

I remember when certain chokes were called "retard coils".

Best regards, Richard Harrison, KB5WZI

883. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a44537.42425305@news.akorn.net>
Source record: 181770

>I'm aware that this is indeed a problem in many areas. Our particular market
>(though semi-rural) is unusual in that the majority of CE's (whether staff or
>contract) are Engineers - some with BSEE degrees, all FCC licensed and with
>20+ years experience (on average) - rather than "engineers" who know how to
>turn a transmitter on and off, and not much else.
>
>But, I certainly am in agreement that if the station takes no corrective
>action - or refuses to even consider that they may have a problem - that he
>FCC should be notified.
>
>Jim Barrett - KF2DA

I'm sure there are a lot of good engineers, but there are also more
"engineers" now than there used to be...especially with small
stations.

I think it's more an attitude problem caused by years of no
inspections and no enforcement than anything else.

That's a rip-off for skilled professionals as well as the public.

73 Tom

884. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <29910-39A44B51-32@storefull-115.iap.bryant.webtv.net>
Source record: 181771

Dennis Furguson wrote:
"At the risk of stating the obvious, the fact that the voltage across and current through an inductor are out of phase says nothing about the relative phase of the currents at each terminal."

Well, we were considering a series circuit with all currents going through all components.

There are actually at least two currents in the circuit. One current is imposed on the inductance. The other is self induced in reaction to the imposed current. These are in phase opposition. The net current is effective in the circuit.

There is nominally a 180-degree difference between the coil terminals. If the voltages and currents were the same at both terminals, they could be shorted with no consequence.

Best regards, Richard Harrison, KB5WZI

885. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A454A1.C930C1D1@att.net>
Source record: 181772

Thanks, Peter - on the mark, again, as usual! <:}

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

"Peter O. Brackett" wrote:
>
> George:
>
> I use Matlab a lot in my work. Paid full price for it and for several of
> the toolboxes. Many thousands of dollars.
>
> Matlab is basically a "Matrix Laboratory". It is heavily oriented towards
> vector and matrix operations, and was derived from a set of linear algebra
> packages.

886. F/S HR2510 & AMP

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: DENNIS L <dlerro@snip.net>
Message-ID: <sq8kndhht91106@corp.supernews.com>
Source record: 181773

FOR SALE 2510 & 200 WATT AMP. $300.00 PLUS SHIPPING.
EMAIL W/ QUESTIONS. KC2FLR@ARRL.NET

--
DENNIS
KC2FLR

887. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8o1m96$p8v$1@nnrp1.deja.com>
Source record: 181774

In article <39a10e57.4456592@news.akorn.net>,
2w8ji@contesting.com (Tom W8JI) wrote:
> On Sun, 20 Aug 2000 21:37:39 -0500, 'Doc <w5lz@oio.net> wrote:
>
> >
> >
> >rattlehead@my-deja.com wrote:
> >>
> >-----clipped-----
> >>
> >> heh, well, not a convenient one, BUT, any solution that works is a
good
> >> one. somebody else mentioned this possibility; could I solve the
problem
> >> by just grounding the body of the switchbox itself maybe? I don't
know
> >> how I could arrange it such that the unused position is re-directed
to
> >> ground, without manually doing so each time; and in this case, I
might
> >> as well do as you say, and just unscrew the vertical's coax.
>
> If the grounding the cable or the switch is having that much effect on
> the antenna, I'd fix the real problem. Otherwise, you are likely
> wasting a bunch of RF that could be going out from a useful place like
> the antenna.
>
> That's why slopers are often called sloppers, because they are sloppy
> systems.
>
> I assume you bring all the feedlines down the tower to ground level,
> and then go into the house with the cable at ground level? And the
> tower is grounded for RF?
>
> 73 Tom
>

Oh yes, the cables all come down to ground level (but I don't have them
grounded at that point, that is my next step; to run a ground wire from
the coax shielded braid to my ground rod near by)... and yes, I have the
tower grounded for RF and lightning both.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."

-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

888. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8o1mn9$ps9$1@nnrp1.deja.com>
Source record: 181775

In article <39A2F8F5.5B4540BF@att.net>,
Bruce Anderson <w1lus@att.net> wrote:
> When two resonant circuits of the same frequency are tightly
coupled
> they will tend to interact. One of the effects is a slight shifting of
the
> circuits resonant frequency. Since the other antenna is supposed to be
a 10
> meter antenna they should not interact. But since they do it probably
means
> that the 10 meter antenna and it's coax lead resonate on 80 meters and
that
> is the circuit reacting with your sloper. Try adding a 1/4 wave length
of
> coax to the 10 meter antenna. I think that may cure the problem.
>
> W1LUS
>
> rattlehead@my-deja.com wrote:
>
> > I just recently re-tuned by 75 meter quarter wave sloper to work on
a
> > higher part of 75 meters (from about 3675 to about 3900). I did this
> > with the aid of an MFJ antenna analyzer. Everything went fine with
the
> > usual "tune, cut and shorten the antenna, and retune" recipie. Then
I
> > hooked the coax back into my 2-position antenna switch box and all
was
> > working well.
> >
> > then I plugged up my other HF antenna (a half wave 10 meter
vertical)
> > back into the other position of the antenna swtchbox, and this
action
> > alone made the resonant frequency of my sloper drop by about 90 to
100
> > kc's (from 3900 to about 3810 or so). when I unscrew the vertical's
coax
> > out of the 2-pos switch box, the resonant frequency of the sloper
climbs
> > back from 3810 back up to 3900.
> >
> > one friend suggested that maybe my sloper isn't grounded well enough

> > (the tower/pole a slower is mounted to is suppose to act, itself, as
> > the counterpoise of the antenna). I would like the thoughts of
everybody
> > else out there.
> >
> > My half wave vertical is an antron-99, and a couple of feet below
the
> > place it is mounted to is where I have the top of the 75/80 meter
sloper
> > mounted. Both coaxs run along side one another down the mast and
tower
> > to my station, for further information.
> >
> > --
> > "As flies to wonton boys are we to the gods;
> > they kill us for thier sport."
> > -- 'Brave New World'
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
>

Would that best be done by figuring 1/4 wave of 10 meters, essentially,
a run of coax that is 2.5 meters in length?

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

889. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A45AC1.3BA2BA6B@eznec.com>
Source record: 181776

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "I only said that the current into one terminal has to equal the current
> out of the other,"
>
> No argument with that as a steady-state statement. There is no long-term
> storage in an inductor.
>
> I was challenging the statement "The currents at the terminals of an
> inductor are in phase."

Maybe the problem is one of semantics. By "equal", I meant, well, equal.
That is, equal in phase and in magnitude. You must not agree with this,
or you wouldn't have written the sentence above.

> An "ideal inductor" has zero resistance (don`t know about zero size) and
> not only opposes current as described by Lenz`s law, but delays current
> flow.

Can you please give us the equation which describes the current delay
from one terminal of an inductor to the other? I2 = F(I1)?

> In a purely resistive circuit, the current is in phase with the voltage.
> If purely inductive or capacitive, the current in a circuit lags or
> leads the voltage by an angle of 90 degrees. If inductance is in series
> with resistance, the current lags the voltage by an angle whose tangent
> is X over R.

How does voltage keep getting into this?

> What is the function relating current in and out of the inductance? The
> current in the circuit is the voltage divided by R + JX.

No, this isn't what I asked for. You've given an equation which relates
the voltage to the current. I'm asking for the equation which relates
the current at one terminal of the inductor to the current at the other
terminal of the inductor.

> The function of current out versus current into a perfect inductance is
> that no delay happens in the resistance (even if there were some) it is
> all in the inductance. There is a delay of 90 degrees in a purely
> inductive circuit. There is zero delay beyond wave propagation time in a
> in a purely resistive circuit with zero inductance.

So you are saying that the current at one terminal of an inductor is in
quadrature with the current at the other terminal, regardless of the

value of the inductance or the frequency? That is, your equation is I2 = -jI1? This is a perfect Hilbert Transformer. I've been looking for one for decades. It's just what's needed for feeding phased arrays.

Unfortunately, it also doesn't exist. Build yourself a couple of simple current probes with ferrite cores, as I've done. Put one on each end of an inductor and watch the currents with a dual-trace oscilloscope. What do you see?

> Delay is obvious when d-c is applied to an inductance. Put one volt
> across a one henry tnductor with one ohm total series resistance, and in
> one second the current will have risen exponentially to 63% of its final
> value of one amp. The time constant is proportional to L over R. (If the
> same one-ohm circuit had a coil of two henries inductance, it would take
> 2 seconds to get an increas up to 0.63 amp through it) T, the time
> required to reach 63% of the resistance limited current through the
> circuit, is a function of L/R, as said above.

I'm failing to communicate. I know that current lags voltage in an inductor. Everyone knows current lags voltage in an inductor. But what does this have to do with the relationship between the currents at the inductor terminals?

> I remember when certain chokes were called "retard coils".
>
> Best regards, Richard Harrison, KB5WZI

Is this just me? Is there something about the way I'm asking the question that's not clear? Did I ask something about voltage without realizing it?

Roy Lewallen, W7EL

890. A yagi w/hi F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Jay Kolinsky <jkolin@worldnet.att.net>
Message-ID: <6dZo5.27661$4T.1669867@bgtnsc07-news.ops.worldnet.att.net>
Source record: 181777

Anyone modeling yagis for HF with high signal rejection off the entire rear half of the ant? F/R such as 35 db and higher?

JK NE2Q

891. Loging Software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Dave Nissen <mcsok9@winco.net>
Message-ID: <8o1njm$dkn4$1@news3.infoave.net>
Source record: 181778

Greetings to the group.

Sorry to stray from the antenna format, but from what I read many on this group are into contesting. I am in the market for logging software. I know that there must be several available, but as of yet I am unable to locate any. The program that I am looking for seems to me to be rather simple. I want it to show "dupes", time, date, frequency, call, and the other usual basic information. I am not particularly interested in software that will control my radio, or packet software.

Thanks to anyone that could help me..

73

Dave de W9COP

892. Re: Lawsuit

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <flZo5.103646$c5.2304671@news2.rdc1.on.home.com>
Source record: 181779

Jumbo <jumbo@juno.com> wrote in message news:3997F86E.677554ED@juno.com...
> hi, I built a fractal antenna from reading the patent
> files on ibm patent website.
> I guess I will be in court someday.
>
> I will post my findings on my website as soon as
> I am able to start it up.
>
> jumbo
>

Think I will start making them and selling them at fleamarkets in Canada.
LOL

Barry D.

893. Re: V-Beam project

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Torsten Clay <tclay@roton.physics.arizona.edu>
Message-ID: <m1aee3bmc0.fsf@roton.physics.arizona.edu>
Source record: 181780

>We are a Contest Group and we'va plans to raise up a 5 V-beam, anybody has
>experience in this kind of antenna? , What's is the easy multi-band feed
>method...?

I've built and used a variety of vee-beams. They are nice antennas, the
only disadvantages in my opinion are that they are large, and the main
radiation lobe is fairly narrow.

For multi-band use, I feed them with open-wire line going into a
Johnson Matchbox antenna tuner.

Torsten Clay
N4OGW

894. Re: Balun for a all-bander dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000823195437.17240.00000041@ng-fl1.aol.com>
Source record: 181781

Hi Reg-

When you get on the see-saw with a person of your weight, we know it's best if the fulcrum is in the middle.

When you get on a see-saw with a really fat person, shouldn't you try to place the fulcrum at a position that doesn't require him to either get off the board or push hard with his legs to start the return trip??

Or am I a nit? What say you??

Rick K1BQT

895. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8o1pna$r2a$1@slb0.atl.mindspring.net>
Source record: 181782

Roy Lewallen wrote in message <39A45AC1.3BA2BA6B@eznec.com>...
>snip<
>
>Is this just me? Is there something about the way I'm asking the
>question that's not clear? Did I ask something about voltage without
>realizing it?
>
>Roy Lewallen, W7EL

No. Even I have understood what has been asked and the several positions put forth. The problem is that Richard keeps on attempting to explain component theory as identical with antenna theory! Don't think that dog will hunt!

Dean Craft -- W4IHK

896. Re: Automatic antenna tuners.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A46C97.2CD097F0@oio.net>
Source record: 181783

pete owen wrote:
>
> Does anyone know how effective the antenna tuners like the Icom AH-4 or
> the one put out be Radio Shack, the Alnico EDX2 are? I'm right in the
> middle of the city and have no room for a trapped dipole. Best I can do
> is about 30 feet of random wire in my attic.
>
> 73s,
>
> Pete

Pete,
I hate to say it, but I think you'd do better with some loaded
vertical than a 30 foot wire and a tuner. But, that would still
be better than nuthin...
'Doc

897. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39A46E25.199532D0@wb6hqk.ampr.org>
Source record: 181784

Richard Harrison wrote:
>
> Dennis Furguson wrote:
> "At the risk of stating the obvious, the fact that the voltage across
> and current through an inductor are out of phase says nothing about the
> relative phase of the currents at each terminal."
>
> Well, we were considering a series circuit with all currents going
> through all components.

By definition, a series circuit is a circuit where the exact same instantaneous current flows through all of the components. The instantaneous current entering any component is exactly equal and opposite the the current leaving the same component. Therefore, the component does not accumulate charge. The current leaving the previous component is exactly equal and opposite to the current entering the next and so on.

If the instantaneous currents are equal, than the phasor representation of _any_ current in the circuit will be of the same phase. This relationship is true regardless of the phase relationships between the current and various voltage drops around the series loop.

bart
wb6hqk

898. Re: Balun for a all-bander dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A46D3B.430B852@oio.net>
Source record: 181785

Darryl Wagoner wrote:
>
> Greetings,
>
> I picked up a all bander dipole from HRO and found out when I was
> setting it up it didn't have
> a balun on it. There is 100' of 450 ohm ladder line. HRO said I needed
> an 9:1 balun, but
> a 4:1 would work as they didn't have 9:1 in stock. I put on a 4:1 from
> my G5RV and it
> seem to work well from 80-6, but 160 was out of the question. Will
> getting a 9:1 balun
> correct the problem of not being able to tune 160? The specs says it
> goes from 160-10
> and didn't say anything about 6.
>
> What should I do? Kept the 4:1 or go for the 9:1?
>
> thanks
> --

Darryl,
It isn't the balun, it's the length of the antenna and
feed line.
'Doc

899. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39A46EAE.8851606A@wb6hqk.ampr.org>
Source record: 181786

Cortland Richmond wrote:
>
> Tom,
>
> A 5/8 wave radiator is fed 1/16 wave from a current maximum.

There will always be a current maximum 1/4 wl from an unterminated end.
Therefore, an end fed 5/8 wl radiator is fed 3/8 wl from the current
maximum.

> To get 180
> degree delay between adjacent current maxima in end fed, collinear 5/8 wave
> radiators, you need another 3/8 wave delay. I suspect that's what the coils
> are set up to provide.

The problem is that a three terminal device is required to create the
necessary delay. There is no way for the current entering one terminal
of two terminal device to be any different from the current leaving the
other terminal unless the device is capable of storing charge. By
definition, a two terminal device, such as an idealized inductor or
coil, is a two terminal device and does not provide the third terminal
required of a phase shifter. Real world components present capacitance
to space and are therefore capable of limited common mode current
(charge accumulation) to ground. Something like a 1/4 wl stub, tuned
counterpoise, or connection to ground are necessary to provide a low
impedance 'ground' for the common mode current.

bart
wb6hqk

900. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2081-39A46B56-64@storefull-114.iap.bryant.webtv.net>
Source record: 181787

Roy Lewallen wrote:
"The currents at the terminals of an inductor are in phase."

The problem may be that we are not assuming the same circuit. Let`s say we have a generator connected to a load through an inductor. The inductor causes a lagging current, but that is not relevant.

The load, being a perfect resistance does nothing to significantly delay the current. Thus, the generator output is applied to the inductor via the load, a resistance, but there is a voltage difference across the inductor because it isn`t a short-circuit and because the terminals of the generator are 180 degrees out of phase and this gets passed on to the terminals of the inductor.

The net current at a single frequency has a single direction in a circuit. So, maybe, "The currents at the terminals of an inductor are in phase", is (1) nonsense, or (2) completely wrong. There are two currents at the terminals of an inductor (1) that imposed by the generator and (2) that resulting from self induction, and these two currents are in opposition, or out of phase.

Best regards, Richard Harrison, KB5WZI

901. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2082-39A46E47-31@storefull-114.iap.bryant.webtv.net>
Source record: 181788

Dean, W4IHK wrote:
"The problem is that Richard keeps on attempting to explain component theory as identical with antenna theory!"

Gimme an example!

Electricity is electricity wherever it happens.

Best regards, Richard Harrison, KB5WZI

902. Anyone using 25G w/ flat top section?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: David Edwards <ham@cybercomm.net>
Message-ID: <8o1qvmutm1@ostrich.cybercomm.net>
Source record: 181789

By flat top section, I mean NOT the tapered one.
I was wondering what others have done to keep the coax out of the way when the rotor is turning. In the past, I just made a loop around the rotor. But, that was with mast mounted rotors. Now I have the tower, and it is more of an obstacle for the coax to rotate around.
Thanks for the read....
PS...If you have had lots of 25G experiance, I would also be interested in chatting. I just put mine up, but still slapping up antennas.
Regards....Dave

903. Re: Anyone using 25G w/ flat top section?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39A46FD6.2EE2D53A@hiwaay.net>
Source record: 181790

Dave- I don't have a lot of experience, but I do have the flat-top 25g.
My set-up, reading from the rotor plate up, is: rotor, top section of
tower (between braces) top plate (flat top) bearing, and tri-bander.
The mast mounts in the rotor, through the bearing, and up to the
antenna. The Coax comes up through the tower (opinions differ on this),
out through the top section of braces (outside the top plate) and up to
the natenna. THe coax is taped to the mast below the antenna to take the
strain. There is enough slack (loop) in the coax for the mast-antenna
assembly to move full circle.

Works for me- Bill- W4BSG

David Edwards wrote:
>
> By flat top section, I mean NOT the tapered one.
> I was wondering what others have done to keep the coax out of the way when
> the rotor is turning. In the past, I just made a loop around the rotor. But,
> that was with mast mounted rotors. Now I have the tower, and it is more of
> an obstacle for the coax to rotate around.
> Thanks for the read....
> PS...If you have had lots of 25G experiance, I would also be interested in
> chatting. I just put mine up, but still slapping up antennas.
> Regards....Dave

904. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39A47C97.CC23607D@wb6hqk.ampr.org>
Source record: 181791

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "The currents at the terminals of an inductor are in phase."

More formally, the algebraic sum of the currents into the two terminals
of any two terminal device is zero.

> The problem may be that we are not assuming the same circuit. Let`s say
> we have a generator connected to a load through an inductor. The
> inductor causes a lagging current, but that is not relevant.

Ok

> The load, being a perfect resistance does nothing to significantly delay
> the current. Thus, the generator output is applied to the inductor via
> the load, a resistance, but there is a voltage difference across the
> inductor because it isn`t a short-circuit and because the terminals of
> the generator are 180 degrees out of phase and this gets passed on to
> the terminals of the inductor.

> The net current at a single frequency has a single direction in a
> circuit. So, maybe, "The currents at the terminals of an inductor are in
> phase", is (1) nonsense, or (2) completely wrong.

Are you saying the two currents do not sum to zero?

> There are two currents
> at the terminals of an inductor (1) that imposed by the generator and
> (2) that resulting from self induction, and these two currents are in
> opposition, or out of phase.

I am not sure what you are saying. The voltage drop (Volts) across a
pure inductance is equal to -L * di/dt where L is the inductance
(Henrys) and di/dt is the time rate of change of the current
(amps/second) flowing through the inductance. There is only one current
through the inductance and the voltage drop is exactly proportional to
the time rate of change of current.

It doesn't matter if you consider the voltage across the inductor to be
caused by self induction, or simply the applied voltage. Either way,
the voltage equals -L * di/dt and the currents entering the terminals
sum to zero.

An inductor does not accumulate charge.

An inductor does store energy. The stored energy is proportional to the
current squared and independent of the terminal voltage. The rate of

change of stored energy is equal to the terminal voltage times the current.

bart
wb6hqk

905. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <c909qsssrd59u31rfb4v54bq8h39f95c0j@4ax.com>
Source record: 181792

On Wed, 23 Aug 2000 07:57:37 -0400, "Ted Ling" <lingted@Hotmail.com>
wrote:

>A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
<snip>
> If this is an inappropriate news group to ask theses
>questions, please
>suggest another. Thanks.
>

Try rec.radio.big-fat-fine

Using a marine radio on land is illegal except for the case of a
hand-held communicating with the "mother ship" only.

906. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39A48B6C.B24D1EBE@usa.alcatel.com>
Source record: 181793

Well shoot, Tom, most of the "rusty bolts' end up on guys anyway. Places where they don't have direct pressure. And they don't have to be bolts. Or even visibly rusty. Just nonlinear.
IIRC the folks on the Prudential Building in Boston are STILL arguing who pays to fix the IM
there -- the building owner says he built according to accepted practices, and the radio folks will have to pay extra if they want all the rooftop metal bonded.

A man could do some EVIL with a little wire and some diodes!

Cortland
(ka5s@saber.net)

Tom W8JI wrote:

> On Wed, 23 Aug 2000 10:25:03 -0700, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >I think I know what Korean station that is, too. But what if the mixing is somewhere
> >else? If I erect a tower that has enough "rusty bolts" in it, I can get mixing products
>
> I've never seen rusty bolts in a tower cause mixing, because the
> pressure on the bolts is so high it is virtually impossible to cause
> problems. I've seen a few poorly installed guy lines cause problems
> from arcing and scratching, or some really slack lines cause problems
> with VHF signals mixing.
>
> But that's beside the point. The mixing product was coming from that
> station. It DF'ed to there, and the FCC found it was there. They were
> told to correct it, and they did.
>
> >from a number of stations, none of them at fault. I've seen this from bad connections on
> >telephone pole messenger cables, too.
>
> The fault always lies with whoever owns the equipment or hardware
> causing the mixing.
>
> >Ditto, of course for telephone interference. Telephones aren't SUPPOSED to pick up radio
> >signals! It's not the transmittors "fault" and there's no rule that says he has to fix
> >someone's telephone.
>
> True enough for the phone, but it's a poor neighbor who moves in and
> doesn't want to "fit in".
>
> 73 Tom

907. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <8o0ghb$9d6$1@slb6.atl.mindspring.net>
Source record: 181794

VHF FM Marine on a camper ?
Sound like Illegal operation to me, hope he is somewhere not to interfere
with marine traffic.
Mixing cables will not work to well.

'Doc wrote in message <39A3C124.9F8B66C@oio.net>...
>
>
>Ted Ling wrote:
>>
>> A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
>> He's placed a Shakespeare 5206-C antenna on a 15' pole. The camper is
>> already wired for cable TV, which he would like to use for this
application.
>> . I know some of the cable run is RG-59, but am not sure if all of it is.
>> The antenna came with RG-8 or RG-58 (the smaller diameter of the two).
Can
>> we mix and match these cables? Will the RG-59
>> work OK for these marine frequencies? Generally speaking, is cable TV
cable
>> appropriate?
>> For this application? What cables (types) are appropriate to use
>> in this application? If this is an inappropriate news group to ask
theses
>> questions, please
>> suggest another. Thanks.
>
>Ted,
> I don't think that mixing the RG-58 and RG-59 will work out
>too well. I'd suggest re-running the feed line with the recomended
>type.
> 'Doc

908. Re: What a nice Antenna News Group

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8o2302jnd1@news1.alltel.net>
Source record: 181795

I would more likely believe your silliness in the Newsgroup has caused any company to question the wisdom of dealing with you. Anyone that would enter into a contract with a person who constantly threatens lawsuits, if they worked for me would be terminated. With no malice intended, I would suggest that you set back and reflect on the perceived attitudes you generate.

With All Good Wishes
Fred W4JLE
"Fractenna" <fractenna@aol.com> wrote in message
news:20000819152452.16044.00000385@ng-fy1.aol.com...
> >Salut,
> >
> >It is very unlikely for a company to make such a statement out of the
> >cold.
> >
> >The truth is Doctor Fractenna upsetted several major companies,
> >pretending they were going to use Freactennas on a large scale.
> >
> >
> >--
> >Gilbert.
> >
> Nonetheless, it is the truth; I stake my career on its veracity.
>
> NC

909. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39A490D3.19863AAB@usa.alcatel.com>
Source record: 181796

Um yeah! Of COURSE there's zero current at a wire end. Is this where I say "duh?"
Got seduced by all those Handbook diagrams again, durn it!

Cortland
(ka5s@saber.ete)

Bart Rowlett wrote:

> Cortland Richmond wrote:
> >
> > Tom,
> >
> > A 5/8 wave radiator is fed 1/16 wave from a current maximum.
>
> There will always be a current maximum 1/4 wl from an unterminated end.
> Therefore, an end fed 5/8 wl radiator is fed 3/8 wl from the current
> maximum.
>
> > To get 180
> > degree delay between adjacent current maxima in end fed, collinear 5/8 wave
> > radiators, you need another 3/8 wave delay. I suspect that's what the coils
> > are set up to provide.
>
> The problem is that a three terminal device is required to create the
> necessary delay. There is no way for the current entering one terminal
> of two terminal device to be any different from the current leaving the
> other terminal unless the device is capable of storing charge. By
> definition, a two terminal device, such as an idealized inductor or
> coil, is a two terminal device and does not provide the third terminal
> required of a phase shifter. Real world components present capacitance
> to space and are therefore capable of limited common mode current
> (charge accumulation) to ground. Something like a 1/4 wl stub, tuned
> counterpoise, or connection to ground are necessary to provide a low
> impedance 'ground' for the common mode current.
>
> bart
> wb6hqk

910. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A49C3C.D31F07DC@eznec.com>
Source record: 181797

Ok, one last time. This time we'll talk about exactly the same circuit.

Let's use your circuit of a source, inductor, and resistor all in series. (Hook the inductor to the positive terminal of the source, the resistor to the negative terminal, and then connect the resistor and inductor together. Define the negative source terminal as zero volts.) Let the source voltage be Vs, the inductance L, the resistance R, and the radian frequency w (for omega). Then the impedance seen by the source = R + jwL. The current EVERYWHERE IN THE CIRCUIT is Vs/(R + jwL). The voltage at the inductor-resistor junction is Vs*R/(R + jwL). The voltage across the inductor = the voltage at the source-inductor junction (the source terminal) minus the voltage at the inductor-resistor junction = Vs*(1 - R/(R + jwL)) = Vs*(jwL/(R + jwL)). The voltage across the inductor can also be calculated as the current through the inductor times its impedance = Vs/(R + jwL) * jwL = Vs*(jwl/(R + jwL)), the same result, as it should be.

The voltage across the resistor is R times the current through it = the voltage at the resistor-inductor junction, shown above. The ratio of voltage across R and the current through it is simply R, the impedance of the resistor. It's purely real, as it should be.

The relationship between the inductor voltage and current (its impedance) is jwL. In phasor terms, the current lags the voltage by 90 degrees, as it should.

Let's try conservation of energy. The power supplied by the source = Vs * Re(I) = Vs * Re(Vs/(R + jwL)) = Vs * Re(Vs*(R - jwL)/(R^2 + (wl)^2)) = Vs^2 * R/(R^2 + (wl)^2). The power consumed by the resistor is |I|^2 * R = (Vs^2 / (R^2 + (wL)^2) * R = Vs^2 * R/(R^2 + (wl)^2). This equals the power delivered by the source, as it should.

So I've given the voltage at each node and the current at each point in the circuit, the impedance of the load, and the power being delivered by the source and consumed by the resistor, using elementary circuit analysis.

Please take a few minutes and do the same using your contention that the current isn't the same everywhere in the circuit. The result should be interesting.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "The currents at the terminals of an inductor are in phase."

>
> The problem may be that we are not assuming the same circuit. Let`s say
> we have a generator connected to a load through an inductor. The
> inductor causes a lagging current, but that is not relevant.
>
> The load, being a perfect resistance does nothing to significantly delay
> the current. Thus, the generator output is applied to the inductor via
> the load, a resistance, but there is a voltage difference across the
> inductor because it isn`t a short-circuit and because the terminals of
> the generator are 180 degrees out of phase and this gets passed on to
> the terminals of the inductor.
>
> The net current at a single frequency has a single direction in a
> circuit. So, maybe, "The currents at the terminals of an inductor are in
> phase", is (1) nonsense, or (2) completely wrong. There are two currents
> at the terminals of an inductor (1) that imposed by the generator and
> (2) that resulting from self induction, and these two currents are in
> opposition, or out of phase.
>
> Best regards, Richard Harrison, KB5WZI

911. Re: Automatic antenna tuners.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "Steve Yates, AA5TB" <aa5tb@swbell.net>
Message-ID: <t61p5.790$kL4.104082@nnrp2.sbc.net>
Source record: 181798

I have no experience with the tuners that you mentioned Pete but I'm using the SGC SC-237 "SmartTuner" at QRP levels with a 50' wire and a relatively poor return (ground) and I have had good luck on all bands from 80m through 6m (quite directional on 6m). I realize that there are more efficient antennas but it "works good for me", what ever that means. I've used better antennas before but I still work a lot of DX on 40m through 20m with QRP so for restricted areas I believe it is a viable option.

Boy is it a simple, worry free setup!

73,
Steve Yates - AA5TB
Fort Worth, TX - EM12gs
http://www.geocities.com/aa5tb/

"pete owen" <nutmeg@w-link.net> wrote in message
news:39A43BF8.83BAA069@w-link.net...
Does anyone know how effective the antenna tuners like the Icom AH-4 or the one put out be Radio Shack, the Alnico EDX2 are? I'm right in the middle of the city and have no room for a trapped dipole. Best I can do is about 30 feet of random wire in my attic.

73s,

Pete

912. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39A4BD6F.900AAEE4@haertig.com>
Source record: 181799

You suppose correctly, though their may be a bit else going on in the feed system to achieve match.

When the dipoles are all on the same side of the support, the azimuth pattern is modestly directional. The spiral arrangement is an effort to make the antenna more omni. You also will see pairs of dipoles on opposite sides of the supports with alternate levels rotated 90ï¿½ around the support.

Gray

Richard Harrison wrote:
>
> Thought this thread was dead. Almost a week ago I observed several
> commercial omni antennas of multiple elements. All of these with visible
> parts which I saw consisted of vertical folded dipole elements. Some
> were arranged back-to-back around a support pipe. Others were
> distributed vertically in addition to radially and spiraled arround the
> support pipe.
>
> I suppose all elements were driven in phase and paralleled to bring
> their combined impedance to 50 ohms or so. Just a guess. This would
> give good lightning protection too.
>
> Best regards, Richard Harrison, KB5WZI

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

913. MOBILE ANTENNA FOR 160M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Malcolm Austin <Malcolm@g3rem.freeserve.co.uk>
Message-ID: <8o2nujlor1@newsg3.svr.pol.co.uk>
Source record: 181800

Hi Every one,
It about time I got myself onto 160 m mobile but
need to look at the antenna possibilities.

The preference would be to build my own and I wonder if anyone has note of
any web addresses that have good designs available?

Obviously efficacy of such a small antenna is suspect, so any comments of
the best (usable) design would be of interest.

Thanks, Malcolm...

914. Re: MOBILE ANTENNA FOR 160M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Malcolm Austin <Malcolm@g3rem.freeserve.co.uk>
Message-ID: <8o44dbtso1@news6.svr.pol.co.uk>
Source record: 181801

Thanks for the info ! I was hoping to find a design that was already proved & relatively efficient; there must be one some where around on the web?

As an old marine engineer, with a metal working lathe at home, full and detailed designs are right up my street! I'll keep looking and hoping for the relevant info to come in.....

Thanks again.

Regards, Malcolm...

Cortland Richmond <Cortland.Richmond@usa.alcatel.com> wrote in message news:39A5483E.271A988D@usa.alcatel.com...
> A few years ago, I decided to operate mobile during the September 160 meter
> contest. I wound a coil with a few hundred feet of #22 wire on a 4 inch PVC
> pipe, about 12 inches long, and put a base loaded antenna on a ball mount in the
> center of my (small) car's roof, with an 8 foot Radio Shack fiberglass whip for
> an element. Obviously the LEAST efficient stuff I could get. Worked 90 stations
> in 30 states, and both coasts from Texas. I had a ;pt pf fin cruising around
> Central TExas working folks with that antenna. I have an upgrade ready, in
> storage, made of B&W inductor stock, about 8 inches in diameter. Watch out 160!
>
> Just build something, and have fun! Besides, experimenting with it is half the
> fun. (I initially filled up the coil and the antenna resonated about 900 KHz.
> Wow! What reception!)
>
> Cortland
> (ka5s@saber.net)
>
> Malcolm Austin wrote:
>
> > Hi Every one,
> > It about time I got myself onto 160 m mobile but
> > need to look at the antenna possibilities.

> >
> > The preference would be to build my own and I wonder if anyone has note
of
> > any web addresses that have good designs available?
> >
> > Obviously efficacy of such a small antenna is suspect, so any comments
of
> > the best (usable) design would be of interest.
> >
> > Thanks, Malcolm...
>

915. Re: Anyone have FS a pocket rocket amplifier for 27mhz?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Malcolm Austin <Malcolm@g3rem.freeserve.co.uk>
Message-ID: <8o44g1$9r6$1@news8.svr.pol.co.uk>
Source record: 181802
Cross-posted to: alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.scanner

Hey, you had better tell all those Italians then with 750 watts of AM !!

Malc..

Mr. Mister <kld68@my-deja.com> wrote in message
news:8o3vsreku1@nnrp1.deja.com...
> Silly boy, amps aren't allowed on the CB bands.
>
> In article <8Pep5.16481$%O6.956807@bgtnsc05-news.ops.worldnet.att.net>,
> "booujie" <nobooujiespam@nohotmailspam.com> wrote:
> > Its a small blue alloy amp with leds across the front of it. And
> toggle
> > switches. Its approximately the size of a pack of Cigarettes. its used
> on 27
> > mhz only . I'm looking for one if anyone has or knows of one. Thanks
> >
> >
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

916. Lakeview "Plate Mount" for Ham Sticks, Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <20000823033936.15434.00000880@ng-cl1.aol.com>
Source record: 181853

Hello,

I came across an interesting mount for HF mobile whips... This is Lakeview's "Plate Mount" for mobile whips with a 3/8" X 24 thread. I have a Jeep Cherokee with a metal back hatch. I am wondering if the hatch itself will be enough of a ground for the whip antenna with this Lakeview Plate Mount attached with bolts to the metal of the rear hatch. This sounds like a "cleaner" setup the my current three magnet mag-mount that I am using now. But I am not willing to run grounding strap all over the back of the Jeep in the process. I get great performance with the mag-mount setup and I am pleased for the most part. The plate mount looks nice and would stop the scratching up of the roof ot he Cherokee and would keep the coax out of the rear passenger door...(not a good thing I know).

Anyone using this sort of mount? The plate on a Jeep Cherokee is in the rear hatch above the rear bumper.... Not sure what this location will do to the SWR?

Thanks for any comments...

Jason S. Hulet
W1WOW

917. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: sideband@cac.net
Message-ID: <39a37ff6.191047619@news.cac.net>
Source record: 181854

Pete:

What I was referring to is this... Twice now I've noticed that it has used words that, while the definitions were correct, were syntactically ambguous. This kind of thing usually happens when someone uses an online thesaurus, and doesn't really understand the definition of the synonym.

I never went to an Ivy league school, and I saw it. ::shrug::

-SSB

On or about Tue, 22 Aug 2000 20:43:02 -0400, "Peter O. Brackett" <ab4bc@ix.netcom.com>, using the forum rec.radio.amateur.antenna did say:

:Hey....
:
:ROFL....
:
:I'd like to get some of that ethic inculcated into me too.... maybe my Ford
:would run better on ethic.
:
:Doesn't ethic have something to do with not being misleading in word and
:deed... or is it a gasoline additive?
:
:I was inoculated for smallpox, but for ethnicity?
:
:Why doesn't someone tell Chip to "give it up", we all know he went to an Ivy
:League School? He's told us at least 50,000 times.
:
:He knows all of the 50 cent words, but can't string them togther in a manner
:that any simple sailor could understand! What?
:
:Inculcated ethic into me!!! How about, "my folks taught me right from
:wrong".
:
:Or... they taught me that it is unfair to "bait and switch" or, "don't tease
:others", or "be direct and answer questions forthrightly", or....
:
: Peter K1PO
:
:--
:Peter O. Brackett
:Morrisville, NC
:--

:sideband <sideband@cac.net> wrote in message
:news:39a1c2d5.77077366@news.cac.net...
:> I think he must use an online thesaurus or something...
:>
:> -SSB
:>
:> On or about 21 Aug 2000 23:48:09 GMT, fractenna@aol.com (Fractenna),
:> using the forum rec.radio.amateur.antenna blathered:
:>
:> :>> Fractenna wrote:
:> :>> I am here to enjoy myself and provide accurate and cogent info. As
:long as
:> :>I am
:> :>> capable of this, I am happy to be here.
:> :>
:> :>If you were capable of only providing accurate and cogent info, and none
:> :>of the rest, everyone else would be happy you were here too.
:> :>
:> :>ac6xg
:> :>
:> :
:> :That is what I do Jim; it comes from years of training and experience--as
:well
:> :as a strong ethic inculcated into me from childhood.
:> :
:> :73
:> :Chip N1IR
:>
:
:

918. Re: CW spacing (was wire antennas free luch but drifted)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "J. Simons, PA0SIM" <jmsi@oce.nl>
Message-ID: <39A382F6.EEE452B9@oce.nl>
Source record: 181855

Tom W8JI wrote:
>
> On Tue, 22 Aug 2000 08:59:05 +0200, "J. Simons, PA0SIM" <jmsi@oce.nl>
> wrote:
>
> >As far as I understand the dashes are shortened or extended the
> >same amound of time as the dots.
> >As a consequence the ratio between them is not constant.
>
> You're right. I checked the algorythm of a keyer I helped do and
> that's what we did in the software and it sounds fine. I remember we
> did a couple of attempts that "sounded wrong" when weight was
> adjusted.
>
> We shortened the dots and dashes by the same amount, and quantify the
> weight only by dots. But that isn't based on a ratio change between
> ...

> I have a second keyer IC (I almost said a taboo word) I have where we
> changed the dots and dashes by the same percentage, keeping the ratio
> the same, and adjusted the space between the dots and dashes to keep
> ...

> So tell me Jan, which way of the two decent sounding ones do you think
> sounds correct? Anyone else?
Tom, I think I prefer the first one. May be because I am familiar only
with this scheme. I use only small changes (+/-5%).

> Is this documented anywhere? Or is it like S units?
May be a good question for the alt.ham-radio.morse newsgroup HI.
Of course we can treat it like S-units. CW by hand-key is always
weighted more or less. Everyone uses its own definition of weight.

By the way:
Checked my TS870, abt. 6dB between S1 and S4, but 12dB between S7 ans
S9.
Also S9 and up to S9+60dB is accurate enough to talk abt dB's.
May be the 60dB is closer to 50dB, but I dont' care.
When I want to measure, I use a (calibrated) measuring-instrument.

73 de Jan PA0SIM

919. FM car antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cave-Man-sayGrr@webtv.net
Message-ID: <11892-39A3807E-1@storefull-112.iap.bryant.webtv.net>
Source record: 181856

Hi everyone sorry if this is off topic but i figured this group would know. I have a 95 jetta with the stock antenna and would like to upgrade it in the stock location. I have seen some ads on the net for a 1/2 wave FM endfed dipole antenna for around $100 any comments on it?

or if you have any sugestions for a good car FM car antenna please comment

Thanks

920. Re: Butternut HF2V on 15 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Jean-Michel Bombar <jmbombar@graphnet.fr>
Message-ID: <UJMo5.1849$iZ4.6077584@nnrp3.proxad.net>
Source record: 181857

Hi Bruce,

It doesn't work with my HF2V... 15m sounds dead when listening on the HF2V.

Jean-Michel

"Bruce Winkelman" <bdwink@home.com> a crit dans le message news:
wlFo5.87983$oj6.1590514@news1.rdc1.tx.home.com...
> In a previous post, I mentioned installing a new Butternut, either a HF2V
or
> HF6V. Since my 40M dipole works quite well on15M (worked 9G5AP on 20 Aug
on
> the first call on 15 CW), can the HF2V (80-40M) be used on 15M as well?
Any
> thoughts?
> Bruce Winkelman AA5CO Tulsa, OK
>
>
>

921. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <vg67qssqisj8e685dprdki7ujip0j0i6fi@4ax.com>
Source record: 181858

On Wed, 23 Aug 2000 02:48:03 GMT, John & Deb
<jminners@worldnet.att.net> wrote:

>Thanks alot for all the replies. Keeping it 2 - 3 inches away from the
>metal surfaces will not be a problem till I have to enter my 2nd floor
>Storm Window. Oh well ... perhaps some experimentation is in order. I'm
>just curious how other hams have handled this. I can't be the only
>one.... geez I hope not :(73 ---------- John

To get the ladder line inside the house, I replaced one pane of glass
with plastic, then drilled holes as appropriate. Worked fine, and
when I sold the house later on, I just reinstalled the glass.

73, Bill W7TI

922. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000823064817.28045.00000366@ng-cb1.aol.com>
Source record: 181859

"....the microwave is used to heat up plastic pipes, foam, etc!"

NC

923. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8o0a94qkk1@uranium.btinternet.com>
Source record: 181860

Placing the pair of insulated wires close together for a few
inches and bringing them indoors through one small hole in
the window pane or window frame has an insignificant effect
on line performance at HF.

Its equivalent of a couple of picofarads in shunt with the
line at that point. It is 'corrected' by an un-noticeable
readjustment of the tuner capacitor.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Bill Turner <w7ti@jps.net> wrote in message
news:vg67qssqisj8e685dprdki7ujip0j0i6fi@4ax.com...
> On Wed, 23 Aug 2000 02:48:03 GMT, John & Deb
> <jminners@worldnet.att.net> wrote:
>
> >Thanks alot for all the replies. Keeping it 2 - 3 inches
away from the
> >metal surfaces will not be a problem till I have to enter
my 2nd floor
> >Storm Window. Oh well ... perhaps some experimentation is
in order. I'm
> >just curious how other hams have handled this. I can't be
the only
> >one.... geez I hope not :(73 --------------- John
>

>
> To get the ladder line inside the house, I replaced one
pane of glass
> with plastic, then drilled holes as appropriate. Worked
fine, and
> when I sold the house later on, I just reinstalled the
glass.
>
> 73, Bill W7TI

924. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000823065143.17496.00001059@ng-cb1.aol.com>
Source record: 181861

"...you dream of heaven and realize it's coated with blue wedges:-)"

NC

925. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000823065704.17496.00001062@ng-cb1.aol.com>
Source record: 181862

"...softball and fishing give way to a hybrid --with the objective to throw the ball, with line, over trees."

NC

926. Re: Minimum-Loss-Pad design or tables

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8o0asl$s02$1@uranium.btinternet.com>
Source record: 181863

Hello Winton,

Download program MATCHPAD from my website. It is EXACTLY
what you need for minimum-loss and other resistive L,T & Pi
networks.

One small file. Not zipped up. Download in a few seconds.
Run immediately. Input data on a "what-if?" basis.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Winton Bell <w.bell@psyc.canterbury.ac.nz> wrote in message
news:39A34DEE.7F57@psyc.canterbury.ac.nz...
> Hi,
>
> I would greatful for information on minimum-loss-pad
design/tables
> for calculating a pad to match 50-ohm and 10-ohm.
>
> Thanks,
> Winton, ZL3AO

927. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <j5Oo5.941$Hs.3958@newsfeed.slurp.net>
Source record: 181864

C'mon, now, fellas.

Can not all of you floccinaucinihilipilify with the best of the poison ivy league?

K3BHJ

928. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3a324.928371@news.akorn.net>
Source record: 181865

On Wed, 23 Aug 2000 02:39:12 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:
.
>I think you will find that it dribbles down inside the 9913 and is no
>longer sealing *by flooding* anything. The flooded area of the
>connector is no longer flooded and the whole thing is a bummer.....
>
>Danny

Ohh, that hollow cable.

I never use that, because water dribbles out of it after a period of
time. During the daytime, it get heated. At night, no matter how I
seal it, it sucks humid air in. The next day the heat pushes the air
out but not the water.

I imagine it would suck the flooding compond in also.

73 Tom

929. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3a471.1260965@news.akorn.net>
Source record: 181866

On Tue, 22 Aug 2000 21:07:15 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:
>The advantage of higher impedance is lower power loss for the same power
>transmission. It`s why audio isn`t distributed at 8 ohms, and it is why
>electrical power isn`t transmitted at 110 volts over long distances. The
>same loss resistance would rob circuits of a higher percentage of the
>power at a lower transmission voltage to current ratio.
>
>Best regards, Richard Harrison, KB5WZI

The feedline isn't the problem. The antenna is.

In an audio system, the 600 ohm distribution impedance is stepped down
through trnsformers at each speaker.

Same with an antenna and the folded monopole.

In an audio system the speaker is just as efficient with a four ohm
coil as a 40 ohm coil, same with a folded monopole.

With a folded monopole you can use a higher impedance transmission
line, but your original argument was about ground loss...not feedline
loss.

Bill Orr ought to remove the error about folded monopoles from his
books and articles, and try to undo the damage he has caused.

73 Tom

930. Re: Ladder Line - with balun box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: k4ia@aol.com
Message-ID: <20000823073225.28945.00000211@ng-fe1.aol.com>
Source record: 181867

I am curious about the W9INN "balun boxes." You run coax from the shack to the 4:1 balun box and then ladder line from the box to the antenna. Seems the best of both worlds if you have to run near metal.

But, does it really work or does the coax defeat the low loss advantage of the ladder line? I suspect we are working with the same loss per foot of coax formulas so a "short" piece of coax would really have little or no effect.

Any comments?
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

931. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: John & Deb <jminners@worldnet.att.net>
Message-ID: <388AF648.102F@worldnet.att.net>
Source record: 181868

Reg Edwards wrote:
>
> Placing the pair of insulated wires close together for a few
> inches and bringing them indoors through one small hole in
> the window pane or window frame has an insignificant effect
> on line performance at HF.
>
> Its equivalent of a couple of picofarads in shunt with the
> line at that point. It is 'corrected' by an un-noticeable
> readjustment of the tuner capacitor.
> --
> --
> Regards from Reg, G4FGQ
> For free radio design software go to:
> http://www.btinternet.com/~g4fgq.regp
> --
> Bill Turner <w7ti@jps.net> wrote in message
> news:vg67qssqisj8e685dprdki7ujip0j0i6fi@4ax.com...
> > On Wed, 23 Aug 2000 02:48:03 GMT, John & Deb
> > <jminners@worldnet.att.net> wrote:
> >
> > >Thanks alot for all the replies. Keeping it 2 - 3 inches
> away from the
> > >metal surfaces will not be a problem till I have to enter
> my 2nd floor
> > >Storm Window. Oh well ... perhaps some experimentation is
> in order. I'm
> > >just curious how other hams have handled this. I can't be
> the only
> > >one.... geez I hope not :(73 --------------- John
> >
> > ____
> >
> > To get the ladder line inside the house, I replaced one
> pane of glass
> > with plastic, then drilled holes as appropriate. Worked
> fine, and
> > when I sold the house later on, I just reinstalled the
> glass.
> >
> > 73, Bill W7TI

Thanks again for the replies. Now to go try to do something and hope the XYL doesn't shoot me or worse yet .... shoot the rig... Appreciate the

help.
John

932. Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Ted Ling <lingted@Hotmail.com>
Message-ID: <R_Oo5.65831$dC1.91643@dfw-read.news.verio.net>
Source record: 181869

A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
He's placed a Shakespeare 5206-C antenna on a 15' pole. The camper is
already wired for cable TV, which he would like to use for this application.
. I know some of the cable run is RG-59, but am not sure if all of it is.
The antenna came with RG-8 or RG-58 (the smaller diameter of the two). Can
we mix and match these cables? Will the RG-59
work OK for these marine frequencies? Generally speaking, is cable TV cable
appropriate?
For this application? What cables (types) are appropriate to use
in this application? If this is an inappropriate news group to ask theses
questions, please
suggest another. Thanks.

933. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3C124.9F8B66C@oio.net>
Source record: 181870

Ted Ling wrote:
>
> A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
> He's placed a Shakespeare 5206-C antenna on a 15' pole. The camper is
> already wired for cable TV, which he would like to use for this application.
> . I know some of the cable run is RG-59, but am not sure if all of it is.
> The antenna came with RG-8 or RG-58 (the smaller diameter of the two). Can
> we mix and match these cables? Will the RG-59
> work OK for these marine frequencies? Generally speaking, is cable TV cable
> appropriate?
> For this application? What cables (types) are appropriate to use
> in this application? If this is an inappropriate news group to ask theses
> questions, please
> suggest another. Thanks.

Ted,
I don't think that mixing the RG-58 and RG-59 will work out
too well. I'd suggest re-running the feed line with the recomended
type.
'Doc

934. Out of Office AutoReply: Ham-Ant Digest V2000 #230

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: dotey@lucent.COM
Message-ID: <D29A604485D6D111BDFC00A0C9AA8C26063B58C5@il0015exch002u.ih.lucent.com>
Source record: 181871

I am currently out of the office on vacation returning 8/28/00.

935. Re: Vertical radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3C2FD.DB2E86E6@oio.net>
Source record: 181872

Bruce,
Any 'lost' radials should contribute to a better performance
of ~any~ antenna. They don't necessarily have to be connected
electrically (connected is better). Wire buried in the ground
doesn't last too long. But, rust is metalic, it still 'adds'
to your ground system.
'Doc

936. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Joe <jmowery@crosslink.net>
Message-ID: <39A3C6C2.1E67329B@crosslink.net>
Source record: 181873

The way I used to do it on ship was to wrap the connector with rubber tape, then wrap with vinyl electrical tape, then apply a coat of 3M Scotchkote(TM). When done right, I know that the connectors would be bright and clean after one year since this was the maintenance interval on the antennas on ship. I don't think that many hams have the seaborne enviroment that exist on a naval ship.

ZZZjim_cronin@juno.comZZZ wrote:

> A local fellow tuned me in on how to waterproof connectors:
>
> Wrap with rubber tape. Use some tension and overlap.
> Wrap that mess with Scotch (3M) electrical tape.
>
> I recently took down an antenna that was up 3 years and
> the connectors were still shiny.
>
> 73,
> Jim
> N2VNO
>
> On Sat, 19 Aug 2000 03:17:44 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
>
> >Roger Halstead (K8RI) www.RogerHalstead.com
> >>
> >> If you want it REALLY, REALLY waterproof, squeeze some silicone seal onto
> >the
> >> connector, then shrink sleeve over that. Make sure that you shrink it
> >from the
> >> center out to the edges and that some silicone "bleeds" out the end of the
> >> sleeving where it goes over the coax. It will take a knife and an
> >afternoon to
> >> ever get it apart again, but it is guaranteed waterproof for life.
> >>
> >Couple of items.
> >If the silicon seal smells like acetic acid? It's the corosive stuff.
> >Don't put it in contained areas.
> >Where I used to work we purchased a whole bunch of transducers potted in the
> >stuff inside cast aluminum boxes.
> >
> >About a year later they started going bad.
> >Sure enough, when we started takeing them apart we found that most of the
> >foil was gone from the boards. Well over $20,000 down the drain plus labor
> >which made the $20,000 look like chicken feed.

> >
> >Get the stuff that "stinks", but not the black stinky stuff as it is
> >conductive.
> >
> >I believe both GE and Dow Corning make the non conductive stuff as well as
> >the regular. I know DC does as I worked for them well over 30 years. That
> >is why I also know that if it smells like acetone it's corosive.
> >
> >I use DC-4 compound and fill the connector, then like Jim, I head the shrink
> >tubing from the center out. Actually I do each end first, then move to the
> >center and work out and use a piece of tubing about five to six inches
> >long.
> >
> >I have used the "bathtub calk" which is usually corosive and had it eat the
> >plating right off the connectors. (smelled like acetone)
> >Also, that stuff cures by moisture so if it cures inside the connector
> >within a few days you can be certain that the connector was not moisture
> >proof, or well sealed, heat shrink tube, or not. Then again, the silicon
> >rubber (such as Silastic RTV @) is water proof, but not moisture proof.
> >
> >But...As I said, it is water proof and will keep salt out as well.
> >>
> >
> >I've even used the bathtub calk to seal coax to dipoles and it turned green
> >where the stuff contacted the copper wire. Course out there and with heavy
> >wire it's not really a problem, but finer wires, solder, and foil in
> >contained spaces are bad news.
> >
> >Roger (K8RI)
> >
> >> Jim
> >> Jim Weir, VP Eng. RST Eng. WX6RST
> >> A&P, CFI, and other good alphabet soup
> >

937. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3C669.CF6C0BA6@oio.net>
Source record: 181874

John & Deb,
I used a 1x6 board, drilled holes the correct distance apart,
ran the Ladder line through the holes, 'hot glued' the wire in the
holes, and forget the impedance 'lump' it makes. Make the board
fit the window opening. You can also use bulkhead connectors
through the board for coax.
'Doc

938. Re: Ladder Line - with balun box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3c55f.9691744@news.akorn.net>
Source record: 181875

On 23 Aug 2000 11:32:25 GMT, k4ia@aol.com (K4IA) wrote:

>I am curious about the W9INN "balun boxes." You run coax from the shack to the
>4:1 balun box and then ladder line from the box to the antenna. Seems the best
>of both worlds if you have to run near metal.
>
>But, does it really work or does the coax defeat the low loss advantage of the
>ladder line? I suspect we are working with the same loss per foot of coax
>formulas so a "short" piece of coax would really have little or no effect.

A better approach for "untuned systems" would be to simply use two
shielded cables (like 75 ohm cables) in push-pull, or shielded
twinlead, for the connection. If you want to use a balun, a 1:1 choke
balun would be better unless you have some idea the impedance at the
terminals of the 450 ohm line is near 450 ohms.

The problem with 4:1 baluns is they have restricted operating ranges.
The core is always part of the system, being magnetized by
differential mode (normal transmission line) currents. It is highly
unlikely the feedline would present anywher near 400 ohms or so (the
normal impedance of "450 ohm" ladder lines) to the balun.

Not only that, the coax would be severely mismatched and add to
impedance gyrations as you change bands.

In many cases you'll find the system doesn't work well on some bands.
Using shielded twinlead, or push-pull 75 ohm cables, and a choke balun
at an unbalanced tuner would be less likely to cause problems.

73 Tom

73 Tom

939. Re: Ladder Line - with balun box

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3C728.A9FE4EED@oio.net>
Source record: 181876

K4IA wrote:
>
> I am curious about the W9INN "balun boxes." You run coax from the shack to the
> 4:1 balun box and then ladder line from the box to the antenna. Seems the best
> of both worlds if you have to run near metal.
>
> But, does it really work or does the coax defeat the low loss advantage of the
> ladder line? I suspect we are working with the same loss per foot of coax
> formulas so a "short" piece of coax would really have little or no effect.
>
> Any comments?
> K4IA
> Buck
> Fredericksburg, Virginia USA

Buck,
Your right, as long as the coax run is short, and you use good
quality coax, it'll work just fine.
'Doc

940. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3c7c0.10300944@news.akorn.net>
Source record: 181877

On Wed, 23 Aug 2000 07:57:37 -0400, "Ted Ling" <lingted@Hotmail.com>
wrote:

>A friend and I are installing a VHF Marine radio in his 1989 5th wheel.

What kind of boat is a "5th wheel"?

If it is a land based vehicle, why are you using a marine radio? Who
will he talk to?

73 Tom

941. Ladder Line - another method

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <yKPo5.1021$Hs.4412@newsfeed.slurp.net>
Source record: 181878

Another out-of-the-box method I used several decades ago was to replace a portion of a window with an empty, weather-proofed, and down-sized A/C shell and plexiglass. Built the tuner outside, with controls inside.

You can control condensation with a lamp as a heat source.

Let your ingenuity take over ...

K3BHJ

K4IA <k4ia@aol.com> wrote in message news:20000823073225.28945.00000211@ng-fe1.aol.com...
> I am curious about the W9INN "balun boxes." You run coax from the shack to the
> 4:1 balun box and then ladder line from the box to the antenna. Seems the best
> of both worlds if you have to run near metal.
>
> But, does it really work or does the coax defeat the low loss advantage of the
> ladder line? I suspect we are working with the same loss per foot of coax
> formulas so a "short" piece of coax would really have little or no effect.
>
> Any comments?
> K4IA
> Buck
> Fredericksburg, Virginia USA
>
> REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
> International, Toll Free, Callback, Calling Cards, Pagers and more Check out
> http://www.ld.net/?bucksavers

942. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Ted Ling <lingted@Hotmail.com>
Message-ID: <tmQo5.65865$dC1.92285@dfw-read.news.verio.net>
Source record: 181879

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39a3c7c0.10300944@news.akorn.net...
> On Wed, 23 Aug 2000 07:57:37 -0400, "Ted Ling" <lingted@Hotmail.com>
> wrote:
> Yes it's land based but at a marina where we hang out. While we are not
on the boat, we enjoy hearing what's going on on the lake. I though the
restrictions on land use were lifted when the system was deregulated?

> >A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
>
> What kind of boat is a "5th wheel"?
>
> If it is a land based vehicle, why are you using a marine radio? Who
> will he talk to?
>
> 73 Tom

943. Re: Minimum-Loss-Pad design or tables

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8o0kuc$q32$2@plutonium.btinternet.com>
Source record: 181880

Design of Matching pad between 50 and 10 ohm terminations :-

Pad resistors = 44.72 ohms and 11.18 ohms.

Mismatch loss without matching pad = 2.55 decibels.

Loss with matching pad = 12.54 decibels.

Data produced by program MATCHPAD. Download from my website
in a few seconds.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp
----

944. Re: Butternut HF2V on 15 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Dave Sjolin <sjolin@swbell.net>
Message-ID: <39A3D7CB.B55963EF@swbell.net>
Source record: 181881

Bruce Winkelman wrote:
>
> In a previous post, I mentioned installing a new Butternut, either a HF2V or
> HF6V. Since my 40M dipole works quite well on15M (worked 9G5AP on 20 Aug on
> the first call on 15 CW), can the HF2V (80-40M) be used on 15M as well? Any
> thoughts?
> Bruce Winkelman AA5CO Tulsa, OK

Bruce, the HF2V works fine on 15 meters. I have both an HF2V ground mounted in my backyard with 15 radials and an R5 vertical mounted a few feet above my house.

Most of the time signals on the two antennas are similar. Sometimes however, dx comes in better on one antenna than the other by several S-units. When this happens, it has always been in favor of the HF2V. The butternut also seems to be a quieter antenna. I dont know if it is the antenna itself or that I'm just picking up more noise from the R5 because it is so much closer to the house

As far as swr is concerned, I have Butternut tuned for 7.1 mhz. With this setting, the swr on 15 meters does not appear to except 1.5:1 across the band.

73 de Dave, N0IT

945. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: jbarrett@remove.stny.rr.com
Message-ID: <iNQo5.19378$dG.546707@typhoon.nyroc.rr.com>
Source record: 181882

In article <39a1bca2.49081965@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI) wrote:

>I came into this late. I've turned in a dozen AM BCB stations with
>problems, and some "busts" have made national press.
>
>You peaked my interest because about a year ago I turned in a Korean
>AM BC station in the Meadowlands in NJ. It was mixing with a
>transmitter from WBBR in the Meadowlands, and coming out on 1830 kHz.
>The mixing was in the Korean programming stations transmitter.
>

As a broadcast engineer and ham, I have to ask... do you contact the stations to let them know that they're having a problem, (and give them a chance to correct it) BEFORE "turning them in" to the FCC?

I pride myself on keeping my transmitters "clean" - but problems can crop up with ATU's, antennas, or grounding systems which could lead to an increase in harmonic radiation, without being immediately apparent in the day-to-day transmitter or antenna readings.

If anyone, (ham or not), were to notify me of such a problem with my transmitter, I can assure you that I would correct it immediately - most CE's would. (And, it has been my experience that the majority of radio engineers are hams themselves. That may not be true everywhere - but in this area, I do not know a single engineer who is not also an active amateur).

If you give the station a heads-up to such a problem, and they do nothing about it, then by all means, contact the FCC... but it seems a bit unfair to bring in the commission immediately - without first letting the station's engineering staff know about it.

Jim Barrett - KF2DA

946. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3deed.16235474@news.akorn.net>
Source record: 181883

On Wed, 23 Aug 2000 13:59:42 GMT, jbarrett@remove.stny.rr.com (Jim Barrett) wrote:

>As a broadcast engineer and ham, I have to ask... do you contact the stations >to let them know that they're having a problem, (and give them a chance >to correct it) BEFORE "turning them in" to the FCC?

Of couse. Who wouldn't do it that way, it's faster?

Unfortunately about 2/3 of the stations (even "engineers") think they can't have a problem or don't really care if they fix a problem...or are unreachable.

>If you give the station a heads-up to such a problem, and they do nothing >about it, then by all means, contact the FCC... but it seems a bit unfair to >bring in the commission immediately - without first letting the station's >engineering staff know about it.

What engineering staff? Since the FCC deregulated BC engineering requirements, it's a mess. Most stations have outside engineers, and few of them care what is going on.

The only really responsive station I've even dealt with was a SWBC station in north Georgia. The owner and engineer, who is a Ham, listened...found the problem...built a trap....and had it fixed within a day.

The second most cooperative was a SWBC station in Nashville, that took almost six months to fix a problem that had been going on for two years.

Deregulation was a bad idea.

73 Tom

947. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <t2So5.3574$x16.255268@monger.newsread.com>
Source record: 181884

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39a3a324.928371@news.akorn.net...
> On Wed, 23 Aug 2000 02:39:12 GMT, k6mhe@arrl.net (Dan Richardson)
> wrote:
> .
> >I think you will find that it dribbles down inside the 9913 and is no
> >longer sealing *by flooding* anything. The flooded area of the
> >connector is no longer flooded and the whole thing is a bummer.....
> >
> >Danny
>
> Ohh, that hollow cable.
>
> I never use that, because water dribbles out of it after a period of
> time. During the daytime, it get heated. At night, no matter how I
> seal it, it sucks humid air in. The next day the heat pushes the air
> out but not the water.
>
> I imagine it would suck the flooding compond in also.
>

Only seal the one end. Course that doesn't help much when you have multiple
connectors outside.

Roger (K8RI)

> 73 Tom

948. Re: FM car antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <JPKjOaY4ChEyFZTMVNAIEBrhoFc9@4ax.com>
Source record: 181885

Cave-Man-sayGrr@webtv.net (Caveman-say-Grr) wrote:

>Hi everyone sorry if this is off topic but i figured this group would
>know. I have a 95 jetta with the stock antenna and would like to
>upgrade it in the stock location. I have seen some ads on the net for a
>1/2 wave FM endfed dipole antenna for around $100 any comments on it?
>
>or if you have any sugestions for a good car FM car antenna please
>comment
>
>Thanks

I have no idea about the antenna you mention, but in the past I have purchased amplified car antennas -- there's a little amplifier in the base of the antenna to amplify the signal -- and that can give you slightly better reception. Check your stereo installer, or go to the web site for Crutchfield car stereos, and see what they have in stock.

Bob
k5qwg

949. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8o0ro5ptp1@slb6.atl.mindspring.net>
Source record: 181886

We had a problem with a new BC station that was interfering with phones and radios over three towns. The local Radio Shack was getting rich on filters. I called the station several times and could not get ahold of the engineer. I went trough several people and it was surprising how few people that work at radio stations have even a clue how radio works. I finally called in on a call in talk show and explained the problem. That finally got some attention and the next day the station engineer called me to "discuss" the problem. He immediately took the attitude that I did not know what I was talking about, his equipment was fine and if I didn't like it, too bad. I then called the FCC. The problem was fixed within a week after that call. I went well out of my way to let the station resolve the problem and ended up having to go to the FCC anyway.
--
CW
KC7NOD
"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39a3deed.16235474@news.akorn.net...
> On Wed, 23 Aug 2000 13:59:42 GMT, jbarrett@remove.stny.rr.com (Jim
> Barrett) wrote:
>
> >As a broadcast engineer and ham, I have to ask... do you contact the
stations
> >to let them know that they're having a problem, (and give them a chance
> >to correct it) BEFORE "turning them in" to the FCC?
>
> Of couse. Who wouldn't do it that way, it's faster?
>
> Unfortunately about 2/3 of the stations (even "engineers") think they
> can't have a problem or don't really care if they fix a problem...or
> are unreachable.
>
> >If you give the station a heads-up to such a problem, and they do nothing
> >about it, then by all means, contact the FCC... but it seems a bit unfair
to
> >bring in the commission immediately - without first letting the station's
> >engineering staff know about it.
>
> What engineering staff? Since the FCC deregulated BC engineering
> requirements, it's a mess. Most stations have outside engineers, and
> few of them care what is going on.
>
> The only really responsive station I've even dealt with was a SWBC
> station in north Georgia. The owner and engineer, who is a Ham,
> listened...found the problem...built a trap....and had it fixed within

> a day.
>
> The second most cooperative was a SWBC station in Nashville, that took
> almost six months to fix a problem that had been going on for two
> years.
>
> Deregulation was a bad idea.
>
> 73 Tom

950. Re: FM car antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3FAF0.CAB3FAA0@oio.net>
Source record: 181887

Caveman-say-Grr wrote:
>
> Hi everyone sorry if this is off topic but i figured this group would
> know. I have a 95 jetta with the stock antenna and would like to
> upgrade it in the stock location. I have seen some ads on the net for a
> 1/2 wave FM endfed dipole antenna for around $100 any comments on it?
>
> or if you have any sugestions for a good car FM car antenna please
> comment
>
> Thanks

A half wave would be something like 5 feet tall, unless it's
loaded. $100 sounds kinda high, but I haven't checked lately...
'Doc

951. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3FA54.5D2E3111@oio.net>
Source record: 181888

Ted Ling wrote:
>
> "Tom W8JI" <2w8ji@contesting.com> wrote in message
> news:39a3c7c0.10300944@news.akorn.net...
> > On Wed, 23 Aug 2000 07:57:37 -0400, "Ted Ling" <lingted@Hotmail.com>
> > wrote:
> > Yes it's land based but at a marina where we hang out. While we are not
> on the boat, we enjoy hearing what's going on on the lake. I though the
> restrictions on land use were lifted when the system was deregulated?

I don't think so, but best way is to ask the Coast Guard. You
really don't wanna use Marine radio unless your licensed for it,
and there are some 'land' stations. They do come looking for the
unlicensed ones though...
'Doc

952. Re: Ladder Line - another method

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A3FC0B.D1F0B22E@oio.net>
Source record: 181889

"David J. Windisch" wrote:
>
> Another out-of-the-box method I used several decades ago was to replace a
> portion of a window with an empty, weather-proofed, and down-sized A/C shell
> and plexiglass. Built the tuner outside, with controls inside.
>
> You can control condensation with a lamp as a heat source.
>
> Let your ingenuity take over ...

Might use the light bulb as a visual tuning indicator too...
'Dco

953. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39A40079.DCA2587A@usa.alcatel.com>
Source record: 181890

Tom,

A 5/8 wave radiator is fed 1/16 wave from a current maximum. To get 180 degree delay between adjacent current maxima in end fed, collinear 5/8 wave radiators, you need another 3/8 wave delay. I suspect that's what the coils are set up to provide. Something to reflect on -- that 1/16 extra on each end of a 5/8 wave radiator is ONLY there as a delay line itself. It's tolerated because the small amount of radiation it contributes doesn't' hurt the pattern much. Ditto for long, coiled delay lines; they have to be short enough to not mess up the pattern, that's all.

Cortland
(ka5s@saber.net)

tom_bruhns@agilent.com wrote:

> I wish I could know that something would work just because I built it.
> Unfortunately, my skills are of an inferior sort, and I generally have
> to fire it up and test it after I build it to make sure it works. I
> don't at all doubt THAT Tom's collinear worked with coils with pendant
> 1/4 waves and not without them, I'm just looking for some practical
> tests that reasonably prove whether a given collinear implementation is
> working or not. I, too, have built collinears, and my tests have told
> me that they work sensibly as the simulation beforehand told me they
> would.
>
> Thanks to Roy for the simulation work he did & posted on this. To me,
> it's clear that a simple two-terminal network won't do for coupling the
> end elements to the driven element, and I'm not surprised that the
> perpendicular quarter wave stub DOES work. But it's not clear to me
> just how well the coils typically used in, for example, the cell phone
> car antennas do their purported job. Those coils are generally a
> significant fraction of a wavelength long...one I measured this morning
> is rougly 1/8 wave long, and a significant diameter. Same with a
> commercial 440 antenna I have that purports to be a collinear. That's
> large enough, and the coil is near enough to the fields of the driven
> element, that I can imagine that it does SOMETHING more than just a
> two-terminal network. Indeed, it at least serves to space the coupled
> element significantly further from the driven element, lowering the
> mutual impedance between those two. -- I wonder if NEC could do a
> reasonable job on a straight-line segmented approximation of such a
> coil, maybe with "square" turns, spaced about 4 wire diameters
> turn-to-turn.
>
> Cheers,

> Tom
>
> In article <399931bf.8620062@news.akorn.net>,
> 2w8ji@contesting.com (Tom W8JI) wrote:
> > On Mon, 14 Aug 2000 22:07:04 GMT, tom_bruhns@agilent.com wrote:
> >
> > >OK...the discussions I've seen here (and been a part of) have offered
> > >various explanations about what's going on, or what people think is
> > >going on. (Or what people know MUST be going on! :-) How about some
> > >_measurements_? HOW do you know that the quarter wave stub worked?
> HOW
> > >does W8JI know that a coil with a perpendiular quarter wave wire
> > >attached to its center tap works, but that the same antenna minus the
> > >quarter wave wire does not give the desired collinear results?
> >
> > Because I built one, about 25 years ago.
> >
> > It was part of a phase I went through, when I was trying to use the
> > 300 feet of space between a couple big Cottonwood trees over a clear
> > field for 40 meter and 80 meter systems.
> >
> > 73 Tom
> >
>
> --
> Tom Bruhns -- K7ITM
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

954. Re: Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000823130440.06756.00003140@ng-cg1.aol.com>
Source record: 181891

>Bottom Line: No one really cares about your bullshit, Chip. Take it to the
>ARRL
>and see if you get published in any real sense. Better yet...why dont you go
>to
>one of the publishers that let you publish anything you want as long as you
>pay
>all the costs? That way your great grandchildren can curse you as they haul
>all
>ten thousand copies that never sold out of your attic when you croak.
>

Ham publishing is on the decline. It's rare, for example, that QST even publishes new antenna material (as opposed to the same old stuff)--instead they send it off to the 'compendia'.

The fact is that the web has had a devastating effect to ham publishing, and that people prefer to see antenna stuff on the web than in print. That's not my opinion--nor my preference-- but that's how it is.

A good web site is a valuable focus for getting info out and that's where the emphasis is at this time.

Please lighten up and relax.

73
Chip N1IR

955. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn8q80sc.17p.X@animas.frontier.net>
Source record: 181892

On Tue, 22 Aug 2000 22:42:55 -0700, Roy Lewallen scribbled:
>Roger Halstead wrote:
>> . . .
>> I in 9913 type cables I use the "Dielectric Grease" and fill the connector.
>> That sutff is good, unfortunately it is both difficult to find and
>> expensive.
>>. . .
>
>The "dielectric grease" I've seen is a silicone grease. I know plumbers
>use silicone grease for lubricating seals -- have you or anyone tried
>getting it at a plumbing shop?

Check in your auto parts store. It is used in the installation
of HV rubbers and boots in the 'sparking' system.

Check also in your favorite surplus/discount/discontinued
electronics catalog. I've seen it offered there, as well.

HTH es 73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

956. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39A408EF.5C20FA89@usa.alcatel.com>
Source record: 181893

I think I know what Korean station that is, too. But what if the mixing is somewhere else? If I erect a tower that has enough "rusty bolts" in it, I can get mixing products from a number of stations, none of them at fault. I've seen this from bad connections on telephone pole messenger cables, too.

Ditto, of course for telephone interference. Telephones aren't SUPPOSED to pick up radio signals! It's not the transmittors "fault" and there's no rule that says he has to fix someone's telephone.

Cortland
(ka5s@saber.net)

Jim Barrett wrote:

> In article <39a1bca2.49081965@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI) wrote:
>
> >I came into this late. I've turned in a dozen AM BCB stations with
> >problems, and some "busts" have made national press.
> >
> >You peaked my interest because about a year ago I turned in a Korean
> >AM BC station in the Meadowlands in NJ. It was mixing with a
> >transmitter from WBBR in the Meadowlands, and coming out on 1830 kHz.
> >The mixing was in the Korean programming stations transmitter.
> >
>
> As a broadcast engineer and ham, I have to ask... do you contact the stations
> to let them know that they're having a problem, (and give them a chance
> to correct it) BEFORE "turning them in" to the FCC?
>
> I pride myself on keeping my transmitters "clean" - but problems can crop up
> with ATU's, antennas, or grounding systems which could lead to an increase in
> harmonic radiation, without being immediately apparent in the day-to-day
> transmitter or antenna readings.
>
> If anyone, (ham or not), were to notify me of such a problem with my
> transmitter, I can assure you that I would correct it immediately - most CE's
> would. (And, it has been my experience that the majority of radio engineers
> are hams themselves. That may not be true everywhere - but in this area, I do
> not know a single engineer who is not also an active amateur).
>
> If you give the station a heads-up to such a problem, and they do nothing
> about it, then by all means, contact the FCC... but it seems a bit unfair to
> bring in the commission immediately - without first letting the station's
> engineering staff know about it.
>

> Jim Barrett - KF2DA
>
>

957. You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: juj <coag@yua.com>
Message-ID: <39A409C9.E15E05C8@yua.com>
Source record: 181894

you are certain that Fractenna (the chirper) knows
NOTHING about antenna design.

958. You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: juj <coag@yua.com>
Message-ID: <39A409F7.2FBC588C@yua.com>
Source record: 181895

you bust a gut laughing at fractal antennas.

959. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a4086a.26858110@news.akorn.net>
Source record: 181896

On Wed, 23 Aug 2000 08:47:41 -0700, "CW" <cmagers@sprynet.com> wrote:

>We had a problem with a new BC station that was interfering with phones and
>radios over three towns. The local Radio Shack was getting rich on filters.
>I called the station several times and could not get ahold of the engineer.
>I went trough several people and it was surprising how few people that work
>at radio stations have even a clue how radio works. I finally called in on a

That's what we get for deregulating things.

The majority of the time when a station has a problem:

1.) I can't contact them for one reason or another (no ID, unlisted
number, no one answers, etc)

2.) They don't have a "staff engineer", or an "engineer" never calls
back.

When I finally reach the "engineer", they usually don't understand the
problem or don't think they could ever have a problem.

One station in north Georgia had their final dipped on the second
harmonic, right on WWV (1250x2)! In three hours of listening, they
never once gave a callsign.

It sure isn't what it used to be when they were regulary inspected and
monitored, and "engineers" used to be licensed!

73 Tom

960. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a40a8d.27404425@news.akorn.net>
Source record: 181897

On Wed, 23 Aug 2000 15:26:17 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>Only seal the one end. Course that doesn't help much when you have multiple
>connectors outside.
>
>Roger (K8RI)

I only use it on vertical runs Roger, and I poke a hole in the bottom
of the drip loop so it can drain. I'm slowly replacing it all now.

73 Tom

961. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a40b39.27577145@news.akorn.net>
Source record: 181898

On Wed, 23 Aug 2000 11:22:44 -0500, 'Doc <w5lz@oio.net> wrote:

> I don't think so, but best way is to ask the Coast Guard. You
> really don't wanna use Marine radio unless your licensed for it,
> and there are some 'land' stations. They do come looking for the
> unlicensed ones though...
> 'Doc

You can listen all you want on shore, but don't transmit unless you
have a health or life situation.

73 Tom

962. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a40be2.27746139@news.akorn.net>
Source record: 181899

On Wed, 23 Aug 2000 09:48:57 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Tom,
>
>A 5/8 wave radiator is fed 1/16 wave from a current maximum. To get 180
>degree delay between adjacent current maxima in end fed, collinear 5/8 wave
>radiators, you need another 3/8 wave delay. I suspect that's what the coils
>are set up to provide. Something to reflect on -- that 1/16 extra on each
>end of a 5/8 wave radiator is ONLY there as a delay line itself. It's
>tolerated because the small amount of radiation it contributes doesn't' hurt
>the pattern much. Ditto for long, coiled delay lines; they have to be short
>enough to not mess up the pattern, that's all.
>
>Cortland
>(ka5s@saber.net)

5/8ths waves have less gain than 1/2 waves when used in collinears,
when the spacing distance from current maxima to current maxima is the
same.

When that extra length is used to move the current peaks apart, you
get some gain when the antenna is longer than obe wavelength overall.

It's like an extended double zepp antenna,

The problem is the phasing sections always radiate, and cause
destrutive interference to the low angle pattern when the antenna is
end-fed. The phase and current ratios are probably almost never right
either.

I have to say I agree with Bart, all the stacked 5/8th end fed
antennas I've seen were no better than 1/4 wl whips. The exception is
they move some radiation up above ground clutter.

73 Tom

963. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <9004-39A4124D-35@storefull-116.iap.bryant.webtv.net>
Source record: 181900

Roy Lewallen is quoted as saying. "The currents at the two terminals of an inductor are in phase."

Difficult. because an inductance does not allow the current to change instantaneously. Thus the current must be delayed when passing through an inductance, so the current must lag the voltage, that is, there is a phase shift.

Best regards, Richard Harrison, KB5WZI

964. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8o15g8$4lo$1@nnrp1.deja.com>
Source record: 181901

In article <20000822200750.15074.00000008@ng-fc1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
>
> Your turn!
>
> 73
> Chip N1IR

You receive legal threats from a pompous ASS.

Sent via Deja.com http://www.deja.com/
Before you buy.

965. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39A4183B.E110C5F2@usa.alcatel.com>
Source record: 181902

Seems half wave sections, spaced a half wave end to end, would be the way to go.
Make 'em coaxial dipoles with feed for the upper one running through the lower
one.

Lessee... 1.5 waves on 2 meters.. ten feet long!

I'll try it!

Cortland
(ka5s@saber.net)

Tom W8JI wrote:

> On Wed, 23 Aug 2000 09:48:57 -0700, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >Tom,
> >
> >A 5/8 wave radiator is fed 1/16 wave from a current maximum. To get 180
> >degree delay between adjacent current maxima in end fed, collinear 5/8 wave
> >radiators, you need another 3/8 wave delay. I suspect that's what the coils
> >are set up to provide. Something to reflect on -- that 1/16 extra on each
> >end of a 5/8 wave radiator is ONLY there as a delay line itself. It's
> >tolerated because the small amount of radiation it contributes doesn't' hurt
> >the pattern much. Ditto for long, coiled delay lines; they have to be short
> >enough to not mess up the pattern, that's all.
> >
> >Cortland
> >(ka5s@saber.net)
>
> 5/8ths waves have less gain than 1/2 waves when used in collinears,
> when the spacing distance from current maxima to current maxima is the
> same.
>
> When that extra length is used to move the current peaks apart, you
> get some gain when the antenna is longer than obe wavelength overall.
>
> It's like an extended double zepp antenna,
>
> The problem is the phasing sections always radiate, and cause
> destrutive interference to the low angle pattern when the antenna is
> end-fed. The phase and current ratios are probably almost never right
> either.
>
> I have to say I agree with Bart, all the stacked 5/8th end fed
> antennas I've seen were no better than 1/4 wl whips. The exception is

> they move some radiation up above ground clutter.
>
> 73 Tom

966. V-Beam project

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Eugeni - EA3QP <ea3qp@retemail.es>
Message-ID: <8o13d8$14bov18@SGI3651ef0.iddeo.es>
Source record: 181903

We are a Contest Group and we'va plans to raise up a 5 V-beam, anybody has experience in this kind of antenna? , What's is the easy multi-band feed method...?

Advanced thanks, for your help.

--
Eugeni - EA3QP
http://personal3.iddeo.es/ea3qp
ea3qp@retemail.es

967. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2081-39A41926-20@storefull-114.iap.bryant.webtv.net>
Source record: 181904

Thought this thread was dead. Almost a week ago I observed several commercial omni antennas of multiple elements. All of these with visible parts which I saw consisted of vertical folded dipole elements. Some were arranged back-to-back around a support pipe. Others were distributed vertically in addition to radially and spiraled arround the support pipe.

I suppose all elements were driven in phase and paralleled to bring their combined impedance to 50 ohms or so. Just a guess. This would give good lightning protection too.

Best regards, Richard Harrison, KB5WZI

968. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39a51be7.10527878@news.seanet.com>
Source record: 181905

On Wed, 23 Aug 2000 18:34:49 GMT, RanHefner <ranhefner@my-deja.com>
wrote:

>In article <20000822200750.15074.00000008@ng-fc1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>>
>> Your turn!
>>
>> 73
>> Chip N1IR
>
>You receive legal threats from a pompous ASS.
>

You issue legal threats (for loss of ego) as a pompous ASS.

73's
Richard Clark, KB7QHC

969. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A42607.5F65EB02@eznec.com>
Source record: 181906

I'm sorry, but I was referring to an ideal inductor, the model used in basic circuit analysis. This idealized element has inductance, but zero physical size. For that component, what I said is true. You should be able to confirm this by consulting any basic circuit analysis text. But since you disagree with this, surely you can quantify it by providing an equation relating the currents at the two inductor terminals as a function of inductance. That is, what is the function F such that current out = F(current in)?

I didn't say anything about the voltage across the inductor, or the relationship between the voltage and current. I only said that the current into one terminal has to equal the current out of the other. The voltage across the inductor is, of course, L*di/dt, where i is the current in the inductor. This current is the same at either end.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen is quoted as saying. "The currents at the two terminals of
> an inductor are in phase."
>
> Difficult. because an inductance does not allow the current to change
> instantaneously. Thus the current must be delayed when passing through
> an inductance, so the current must lag the voltage, that is, there is a
> phase shift.
>
> Best regards, Richard Harrison, KB5WZI

970. Balun for a all-bander dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Darryl Wagoner <darryl@shecora.com>
Message-ID: <39A4257E.66EB4770@shecora.com>
Source record: 181907

Greetings,

I picked up a all bander dipole from HRO and found out when I was
setting it up it didn't have
a balun on it. There is 100' of 450 ohm ladder line. HRO said I needed
an 9:1 balun, but
a 4:1 would work as they didn't have 9:1 in stock. I put on a 4:1 from
my G5RV and it
seem to work well from 80-6, but 160 was out of the question. Will
getting a 9:1 balun
correct the problem of not being able to tune 160? The specs says it
goes from 160-10
and didn't say anything about 6.

What should I do? Kept the 4:1 or go for the 9:1?

thanks
--
Darryl Wagoner DE WA1GON
603-324-2151

971. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8o17gp$2ec0$1@heap.juniper.net>
Source record: 181908

Richard Harrison <richardharrison@webtv.net> wrote:
>Roy Lewallen is quoted as saying. "The currents at the two terminals of
>an inductor are in phase."
>
>Difficult. because an inductance does not allow the current to change
>instantaneously. Thus the current must be delayed when passing through
>an inductance, so the current must lag the voltage, that is, there is a
>phase shift.

At the risk of stating the obvious, the fact that the voltage across
and current through an inductor are out of phase says nothing about the
relative phase of the currents at each terminal.

Or, to put it slightly differently, the voltage induced across an inductor
resists changes to the current at both terminals in an identical fashion,
so the currents at both terminals remain the same at all times. There's
only one voltage across a two terminal inductor so there can't be two
different currents.

Dennis Ferguson

972. 23rd Annual LARC HAMFEST 2000 SUNDAY, SEPT. 24TH

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: VE3SLO <ve3slo@kbsites.on.ca>
Message-ID: <dZVo5.103096$c5.2274143@news2.rdc1.on.home.com>
Source record: 181909

London Amateur Radio Club has another hamfest on the way. This is expected to be the biggest and best ever at out new location! Computers, radio equipment and electronics flea market. See the web site for more details.

LARC HAMFEST 2000
SUNDAY, SEPT. 24TH
9:00 AM TO 1:00 PM
VENDORS SETUP 8:00 AM
ADMISSION: $6.00, TABLES: $8.00

More details at http://www.larc.on.ca

973. Re: A collinear conundrum

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39A43419.44D5AC9C@mwci.net>
Source record: 181910

Roy Lewallen wrote:

> That is, what is the function F such that
> current out = F(current in)?

The thing that causes some confusion is that the phase between the "applied voltage" and the "through current" involves more than the low frequency inductance of the coil. Because the wire may be a large fraction of a 1/4 wavelength, we should use the "wave equation", in which the phase shift depends on the electrical length as well as its low frequency inductance. The travel time through the wire adds additional phase shift. That is why transmission line inductors have a different reactance vs frequency than lumped coils.

But if we place a voltage *across* the two terminals and measure the *through* current between the two terminals, the current is the same amplitude and phase (relative to the applied "across voltage") at each end. In that respect it is just like any other coil.

Bikk W0IYH

974. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2308001328050001@a3a05603.sympatico.bconnected.net>
Source record: 181911

In article <8nvnkh$784$1@slb0.atl.mindspring.net>, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

> Of course many feel that the ultimate math package is Wolfram's
> Mathematical... everyone to their own taste.

A good case can be made for Maple:

<http://www.maplesoft.com>

An inexpensive student version is available. It does nearly everything the
full-priced version does. The full-priced version is nice if your employer
has a site licence ;-).

David, ex-W8EZE and retired SFU math prof, who bought his own full-priced
copy a long time ago before SFU decided to pay for a site licence :-(.

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

975. Re: these endless persoal wars

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Hans Johansson <hans.johansson@mbox345.swipnet.se>
Message-ID: <ayWo5.2996$QY6.32034@nntpserver.swip.net>
Source record: 181912

YES, I agree a 100 % with you !!

jack parr skrev i meddelandet <39A2F687.C02D1CCD@sympatico.ca>...
>thank God for the "Skip the thread".
>We would never get to see the real stuff on all these NG's which are for
>Hams & other nuts (Like Me!!!) who love messing around with ham gear.
>Will some guru out there kindly work up a filter to dump ALL of these
>personals into the everlasting fire? We will put your name up in
>lights!!!
>
>Disgusted
>

976. Re: Vertical radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a436ab.75570335@news.galilei.com>
Source record: 181913

Hi Doc

I've lived here 21 years and ALL of my insulated copper radials are still in the same condition as when they were planted. If you remove the insulation, the wire is usually still shiney even.

Now the 2x4 welded wire fabric I put down under the sod 20 years ago is gone from many places, still exists in others but badly rusted.

Funny, a shrub I had planted when I first moved here had died soon afterwards. We went to plant another one only a few weeks ago in the same spot, as I dug down, I expected to hit old roots and god knows what else, instead I came up with one thing. The ball of black plastic wrap that we removed from the original bush, wadded up and stuck to the edge of the hole. It had not deteriorated one iota underground. Above ground UV would have destroyed it completely in less than a year.

TTUL
Gary

977. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a4389f.76070940@news.galilei.com>
Source record: 181914

Hi Joe

Interesting, we used to use ScotchKote as well, but it was not
flexible, it was like a very hard pea green color thick 2 part enamel.

TTUL
Gary

978. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: jbarrett@remove.stny.rr.com
Message-ID: <HMWo5.19536$dG.559530@typhoon.nyroc.rr.com>
Source record: 181915

In article <39a3deed.16235474@news.akorn.net>, 2w8ji@contesting.com (Tom W8JI) wrote:

>Unfortunately about 2/3 of the stations (even "engineers") think they
>can't have a problem or don't really care if they fix a problem...or
>are unreachable.
>
>>If you give the station a heads-up to such a problem, and they do nothing
>>about it, then by all means, contact the FCC... but it seems a bit unfair to
>>bring in the commission immediately - without first letting the station's
>>engineering staff know about it.
>
>What engineering staff? Since the FCC deregulated BC engineering
>requirements, it's a mess. Most stations have outside engineers, and
>few of them care what is going on.
>

I'm aware that this is indeed a problem in many areas. Our particular market (though semi-rural) is unusual in that the majority of CE's (whether staff or contract) are Engineers - some with BSEE degrees, all FCC licensed and with 20+ years experience (on average) - rather than "engineers" who know how to turn a transmitter on and off, and not much else.

But, I certainly am in agreement that if the station takes no corrective action - or refuses to even consider that they may have a problem - that he FCC should be notified.

Jim Barrett - KF2DA

979. Automatic antenna tuners.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <39A43BF8.83BAA069@w-link.net>
Source record: 181916

Does anyone know how effective the antenna tuners like the Icom AH-4 or the one put out be Radio Shack, the Alnico EDX2 are? I'm right in the middle of the city and have no room for a trapped dipole. Best I can do is about 30 feet of random wire in my attic.

73s,

Pete

980. Re: Marine VHF question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39A43FEC.1D2A4204@attglobal.net>
Source record: 181917

Correct, You can be land based as a base station to run a marine operation or to communicate with your boat, as the fisherman and charter captains do, but not to converse like a CB Radio with who ever is out there. I thought he was using it to communicate with his boat while they were out on the lake. Often times (unfortunately) some of the small inland lakes and rivers like Corps of Engineers Projects, etc. have pretty relaxed VHF operations because who cares, no one can hear them, but I'd be careful on a major boy of water where marine traffic has protocols.

Tom W8JI wrote:

> On Wed, 23 Aug 2000 11:22:44 -0500, 'Doc <w5lz@oio.net> wrote:
>
> > I don't think so, but best way is to ask the Coast Guard. You
> > really don't wanna use Marine radio unless your licensed for it,
> > and there are some 'land' stations. They do come looking for the
> > unlicensed ones though...
> > 'Doc
>
> You can listen all you want on shore, but don't transmit unless you
> have a health or life situation.
>
> 73 Tom

981. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a44398.42009636@news.akorn.net>
Source record: 181918

On Wed, 23 Aug 2000 10:25:03 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>I think I know what Korean station that is, too. But what if the mixing is somewhere
>else? If I erect a tower that has enough "rusty bolts" in it, I can get mixing products

I've never seen rusty bolts in a tower cause mixing, because the
pressure on the bolts is so high it is virtually impossible to cause
problems. I've seen a few poorly installed guy lines cause problems
from arcing and scratching, or some really slack lines cause problems
with VHF signals mixing.

But that's beside the point. The mixing product was coming from that
station. It DF'ed to there, and the FCC found it was there. They were
told to correct it, and they did.

>from a number of stations, none of them at fault. I've seen this from bad connections on
>telephone pole messenger cables, too.

The fault always lies with whoever owns the equipment or hardware
causing the mixing.

>Ditto, of course for telephone interference. Telephones aren't SUPPOSED to pick up radio
>signals! It's not the transmittors "fault" and there's no rule that says he has to fix
>someone's telephone.

True enough for the phone, but it's a poor neighbor who moves in and
doesn't want to "fit in".

73 Tom

982. You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:07:50 UTC
From: fractenna@aol.com
Message-ID: <20000822200750.15074.00000008@ng-fc1.aol.com>
Source record: 182000

To lighten the dispeptic and dispirited tone of this NG, let me interject a new

'joke' series. Try your own and share:-)

For example

"YOU KNOW YOU'RE AN ANTENNA GURU WHEN...

...EZNEC doesn't mean a facile kissing session:-)"

Your turn!

73
Chip N1IR

983. Re: Loop Skywire, Thoughts Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:26:49 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <1956qs03lub02eamijtaqbjmopspigonqb@4ax.com>
Source record: 181821

On Sat, 19 Aug 2000 00:09:23 GMT, cathexis@erols.com (Set'em up Joe)
wrote:

> The 2000 ed. of The A.R.R.L. Hndbk. lists a project to
>throw up a 1 wavelength horizontal loop they call, " The Loop
>Skywire." It's cheap, I've got the wire (500ft. roll of 14AWG ins.),
>and the trees to throw up it up as a lop-sided horizontal Quad, in
>effect. So ,okay go for it.

I have a full wavelength loop for 160m up here, it isn't a very pretty
shape (sort of a twisted squashed square) but it works great on every
band I have tried it on, even 6m
I have it fed with ~ 50 feet of RG58 but if I was to install it again
I would use RG213 to reduce losses on 6m.

I worked Argentina last night using 25 w CW, and a QRP station in NH
USA who was using a G5RV both on 40m

It's not very good for the locals on 40m, but for DX it's the dogs
wotsists.

I have a T2FD (you know, the one with the dummy load in the middle)
and it's better on 40m for local (under about 500Km) contacts.

I have also worked South africa (~10,000 KM) from here (Ireland) using
it on 6m.

> What I'd like is feedback on a couple of questions. First
>is insulators. I can scavenge two egg-types but getting more
>means basically a 2 hr. expedition and more money.

I don't know where you live but if there is a farm supply shop near
you, you will find all sorts of handy insulators along with some nifty
springs for taking out the shock of trees moving and a few other bits
in the Electric fence section.
Farm supply shops have all sorts of antenna hardware, they just don't
call it that....

Bits of plastic pipes with holes drilled in it also works

>They're not
>a Home Depot / RS item unless I but another RS SW Ant. Kit.
>Since the wire is insulated, how important are they?? Just to
>counteract line tension by swaying trees??

An insulator won't help with the shock but the big springs they sell
for stretching electric fence across gates etc will work a treat if
fitted between the insulator and the guy rope.

>maybe I'd rather just
>take my chances if that's true.

well you could put one end on a pulley with a weight on it

> Secondly, this loop certainly gets a glowing review from
>the Hndbk. Do you agree with it? Experience with it? To compare,
>currently I'm using a 66ft. random wire 20ft up and I'm using it for
>my reciever (RS DX-392).

It will hammer the SH*T out of the66 ft random wire but it may
overload your receiver.

>So this loop is for RX only. Not sure
>how much higher I can get with the loop (especially if I have to
>climb up and tie off insulators). Which is another issue: Even if
>insulators are worth it, would it be better to go for max. alttitude
>of the circuit and just forgo the insulators?

You will want insulators (or a few feet of synthetic rope at a pinch)
if you plan on using it for transmit.

>I have at least two
>possible "routes" to use; the first is a shade over 40M wavelength,
>the 2nd a shade over 80M wavelength. I wanted to go with the
>80M for broader band coverage.

Go for the 80m one, these loops work a teat on all harmonically
related bands (unlike dipoles that only work on odd harmonics.)

> I'm a newly licensed ham and
>don't have more than Tech. privs. right now so this is just to make
>for some better DX'ing on my reciever.

Congats, hope to meet you on air sometime

> Seems easy and cheap,
>what do you think?

Go for it.

73's abd good luck
Brendan Minish EI6IZ

--
Brendan Minish
The reply address works but
This will get to me faster
bminish at eircom dot net

984. Re: Anyone at all happy with the Outbacker Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:51:48 UTC
From: 2w8ji@contesting.com
Message-ID: <39a31c2b.58037279@news.akorn.net>
Source record: 182001

On Tue, 22 Aug 2000 20:04:39 -0400, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>Tom,
>
>I think that larger dia. wire and larger coils DO have higher Q---up to
>a point.

Sure they do. That point is where the self-resonance of the inductor
starts to move down towards the operating frequency.

The optimum form factor of an inductor varies with the end
application.

If you have a loading coil without much capcitance above it, you want
a long slender coil.

If you have a lot of capacitance above the coil and don't need much
reactance, a large coil with an almost 1:1 L/D is better.

Of course if you can use a L/D of almost one, the ESR of the coil and
Q is likely not a major issue anyway.

>Small dia coils with smaller wire and closely spaced turns are
>often lossy.

The only constant thing about an inductor is optimum Q for a given
inductor occurs when turns are spaced one turn diameter.

> When you get over about 4" coil dia., you have passed the
>point where return begins to diminish. Some of those "monster" coils DO
>have high Q, BUT that efficiency works against itself in that they be-
>come so sensitive to their surroundings that one would be just as well
>off with the smaller coils you mentioned.

Not so. I can site common applications where a long slender coil has
more Q than a 4" coil. It all depends on how much reactance you need.

The sensitivity to surroundings is more related to the reactance
required or poor design than the coil Q. That's because the system
resistance is set by ground losses, not inductor ESR.

My highest efficiency mobile antennas are also the broadest bandwidth
antennas I have.

>from where the tap was installed. I see some of these HUGE bugcatchers
>at hamfests and wonder how the operators can get any results at all when
>under way.

I see bugcatchers and other antennas with hats at the base of the whips. I wonder why they bother with a whip at all, if they don't want current to flow into the whip.

It all Ohm's law. In a mobile ground losses swamp-out inductor Q variations. Who cares if inductor ESR is one quarter ohm or two ohms when ground losses add 10 ohms to the system.

It's more what you do wrong that matters, than whether the wire in the coil is 1/4 inch copper tubing or number 12.

73 Tom

985. Verticals and trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:53:42 UTC
From: Bruce Winkelman <bdwink@home.com>
Message-ID: <qgFo5.87981$oj6.1590142@news1.rdc1.tx.home.com>
Source record: 182002

After 2 brief, disastrous affairs with verticals from GAP and Moseley, I have decided to return to my first vertical love, the Butternut. A tower and beam, however desirable, is not possible at present. Hope to put up a new Butternut, either the HF2V or HF6V before the first of October. My old vertical mounting pipe has moved closer to trees than it was 15 years ago (the trees grew and new ones planted). If I reuse the old pipe mount, the vertical will be within 3 feet of branches on the west side of the yard and within 15 feet of branches to the northeast. Should I worry about the proximity of the trees? What effect will the trees have at HF? Should I just forget about it and have fun? Any advice, suggestions, experiences greatly appreciated.
Bruce Winkelman AA5CO Tulsa, OK

986. Butternut HF2V on 15 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 00:59:08 UTC
From: Bruce Winkelman <bdwink@home.com>
Message-ID: <wIFo5.87983$oj6.1590514@news1.rdc1.tx.home.com>
Source record: 182003

In a previous post, I mentioned installing a new Butternut, either a HF2V or HF6V. Since my 40M dipole works quite well on15M (worked 9G5AP on 20 Aug on the first call on 15 CW), can the HF2V (80-40M) be used on 15M as well? Any thoughts?
Bruce Winkelman AA5CO Tulsa, OK

987. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:03:43 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210343.09810.00000273@ng-ba1.aol.com>
Source record: 182012

still bored huh?

>To lighten the dispeptic and dispirited tone of this NG, let me interject a
>new
>
>'joke' series. Try your own and share:-)
>
>For example
>
>"YOU KNOW YOU'RE AN ANTENNA GURU WHEN...
>
>...EZNEC doesn't mean a facile kissing session:-)"
>
>Your turn!
>
>73
>Chip N1IR
>
>
>
>
>
>

988. Re: these endless persoal wars

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:04:31 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210431.09810.00000274@ng-ba1.aol.com>
Source record: 182005

hmm another take a swipe and run

>thank God for the "Skip the thread".
>We would never get to see the real stuff on all these NG's which are for
>Hams & other nuts (Like Me!!!) who love messing around with ham gear.
>Will some guru out there kindly work up a filter to dump ALL of these
>personals into the everlasting fire? We will put your name up in
>lights!!!
>
>Disgusted
>
>
>
>
>
>
>

989. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:05:29 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210529.09810.00000276@ng-ba1.aol.com>
Source record: 182004

ignored? everything has inductance

>> Hi Tom,
>>
>> One problem I see with slinky antennas is the effect of all that
>> inductance is ignored.
>>
>> For example slinky's are often used as Beverages, but the promoters
>> assume the impedance of the slinky is the same as a non-coiled
>> conductor and ignore the loading and phase delays effects of all the
>> hundreds of turns of wire.
>>
>> How many turns are in the slinky antenna you have? How are they
>> distributed, evenly? How is the antenna fed, like a dipole? How is the
>> feedline routed? How far from house wiring is it?
>>
>> Remember any antenna right in the middle of your house is going to be
>> a problem, becuase it will couple to every conductor within a few
>> wavelengths with an intense field. I'd expect RFI unless you run flea
>> power.
>>
>> Can you get anything outside? No balcony?
>
>
>Oh yeah, I guess it would act like a large inductor with all the coils
>it has. I never really thought about that, but it make sense.
>I don't know off hand without looking at it how many coils it has (I'm
>sending this message from work...shame on me!), the antenna is hung
>like a dipole about 13 feet across with the coils about 1/2 inch apart.
>It is fed with a 20 foot coax (50 ohm) going into one of the bedrooms.
>I'm not sure what kind of house wiring is behind the wall, but I'm sure
>there is something. I do have a patio with a 6 foot tall wood fence
>around it that I should try hanging it on and see what happens. I
>haven't tried that yet.
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>
>
>
>
>
>

990. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:05:35 UTC
From: 2w8ji@contesting.com
Message-ID: <39a3229a.59684895@news.akorn.net>
Source record: 182006

On Tue, 22 Aug 2000 23:37:39 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:

>
>Yes, but don't try it on 9913!
>
>Danny

Why Danny?

991. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:06:23 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210623.09810.00000277@ng-ba1.aol.com>
Source record: 182008

only a problem when you approach the aluminium

>I posted this question under another topic but never got an answer. I 'll
>try again.
>Can one use Ladder line on a Aluminum sided house with storm
>windows???? I understand that the desire is to keep the line away from metal
>whenever possible.
>Perhaps the question is dumb but I'm really interested as I'd like to run a
>Long Wire outside
>but getting back into the house seems like it might be a problem????????
>
>
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>

992. RE: Answer to Ed's Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:07:33 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210733.09810.00000278@ng-ba1.aol.com>
Source record: 182009

of course their deaf
these corpses aint goin anywhere

993. Re: Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:08:18 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210818.09810.00000279@ng-ba1.aol.com>
Source record: 182011

you sure talk strange teresa

>If this is such a killer antenna why doesn't every ham scramble and build one
>now?
>
>By the way...Arnie Coro is a better man than anyone needing to post stupid
>comments about an antenna no one gives a damn about in a news group.
>
>Bottom Line: No one really cares about your bullshit, Chip. Take it to the
>ARRL
>and see if you get published in any real sense. Better yet...why dont you go
>to
>one of the publishers that let you publish anything you want as long as you
>pay
>all the costs? That way your great grandchildren can curse you as they haul
>all
>ten thousand copies that never sold out of your attic when you croak.
>
>I think you, your cohorts AND your critics all oughta get a life. Go play
>with
>your radios, quit spreading your sewage, shut up, grow up, be amateur radio
>operators.
>
>The subject, the attitudes, the whole thing...utterly goddamn useless. Use
>some
>of that intelligence that gave you the ability to earn a PhD and accept it
>sometime soon...maybe after a long few minutes of looking in a mirror.
>
>
>
>
>
>

994. Re: Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:09:43 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822210943.09810.00000280@ng-ba1.aol.com>
Source record: 182015

this is the same old perspective
dont take candy from this man

>>If this is such a killer antenna why doesn't every ham scramble and build
>one
>>now?
>>
>>By the way...Arnie Coro is a better man than anyone needing to post stupid
>>comments about an antenna no one gives a damn about in a news group.
>>
>>Bottom Line: No one really cares about your bullshit, Chip. Take it to the
>>ARRL
>>and see if you get published in any real sense. Better yet...why dont you go
>>to
>>one of the publishers that let you publish anything you want as long as you
>>pay
>>all the costs? That way your great grandchildren can curse you as they haul
>>all
>>ten thousand copies that never sold out of your attic when you croak.
>>
>>I think you, your cohorts AND your critics all oughta get a life. Go play
>>with
>>your radios, quit spreading your sewage, shut up, grow up, be amateur radio
>>operators.
>>
>>The subject, the attitudes, the whole thing...utterly goddamn useless. Use
>>some
>>of that intelligence that gave you the ability to earn a PhD and accept it
>>sometime soon...maybe after a long few minutes of looking in a mirror.
>>
>
>Disruptive technologies usually have profound critics--such as yourself--who
>make extra special efforts to attack:
>
>1) without any support from fact;
>2) targetted to discredit the individual for things actually not said,
>implied, or inferred;
>3) diverting the argument to base issues which have nothing to do with the
>matter at hand.
>
>Rest assured, in coming months, there will be yet more fractal antenna
>designs
>for use for experimentation by hams. I am proud of the 'gung ho' attitude of
>the amateur radio fraternity, and extremely plased to have presented a design

>which has no peer in the small size I was asked to consider.
>
>With best wishes,
>
>Nathan Cohen, Ph.D.
>N1IR
>
>
>
>
>
>

995. Vertical radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:09:59 UTC
From: Bruce Winkelman <bdwink@home.com>
Message-ID: <HvFo5.87984$oj6.1591269@news1.rdc1.tx.home.com>
Source record: 182013

Another vertical question related to my new Butternut installation....
Over the course of my vertical affairs mentioned in a previous post, my backyard has accumulated nearly 1000 ft of copper wire in the thatch. I can easily find the ends to 8 radials recently laid out and the other wire ends are buried and can probably be found with some educated digging nearby. If my memory of installation nearly 15 years ago is sound, most radials were insulated 14G copper wire and I assume that they are reasonably intact and relatively uncorroded. This will probably sound really stupid but...will unattached radials still be beneficial to the vertical or will only the radials attached physically to the feed point of the vertical be "used" and "seen" by the antenna? Thoughts and experience appreciated.
Thanks in advance for any advice.
Bruce Winkelman AA5CO Tulsa, OK

996. Re: Marine Radio Antenna cable specs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:10:37 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211037.09810.00000281@ng-ba1.aol.com>
Source record: 182017

you have more problems than cable

>A friend and I are installing a VHF Marine radio in his 1989 5th wheel.
>He's laced a Shakespeare 5206-C antenna on a 15' pole. The camper is
>already wired for cable TV. I know some of the cable is RG-59, but am not
>sure if all of it is. The antenna came with RG-8 or RG-58 (the smaller
>diameter of the two). Can we mix and match these cables? Will the RG-59
>work OK for these frequencies? What cables (types) are appropriate to use
>in this application?
>
>
>
>
>
>
>
>

997. Re: DOWNLOAD YOUR FREE TRIAL VERSION OF POSTAGENT!! 7814

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:11:47 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211147.09810.00000282@ng-ba1.aol.com>
Source record: 181819

their success is adding your name to their list

>What if you could reach a world-wide audience in an instant? You can with
>PostAgent!
>
>Turn your computer into a large scale Usenet news posting machine and Nuke
>the Competition with PostAgent!!
>
>Use it to maximize the exposure of your ideas or products on the
>newsgroups!!!
>
>
>
>Download your FREE trial version of PostAgent NOW and start promoting your
>business on the net.
>
>
>
>PLEASE VISIT http://www.postagent.com/default.asp?fromAgentID=2084 for more
>information.
>
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>
>
>
>
>
>
>
>
>dhtbcnubgvtqzbchmukqwrbecxxupclwuhtkcikjqpzpjmepzyyvlhifmftophlyfk
>
>
>
>
>
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>
>

998. Re: Project Skywire: No More!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:13:17 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211317.09810.00000283@ng-ba1.aol.com>
Source record: 182007

upagain downagain finnegan

at least ur doing something

>Greetings,
>
> That's right; 24 hours after I put it up I took it down.
>Reason? The east leg of wire was barely over the roof and
>worse, 10ft. from my power line. Though trees were good,
>no insulators or tie-offs were used and I felt this posed an
>un-acceptable risk. Had that leg of the circuit snapped the
>only place it could have gone is sliding off the roof to drape
>on the power lines. I refused to take that chance.
>
> But,.....Now there's a new wire! Haven't even really
>checked it out yet. Will have to see about previously mentioned
>BCB RFI. There are pluses and minuses to this wire. First it's
>no loop, just a random wire. Only 130ft. approx, not the 200ft.
>of earlier one. One nice advantage: Height! Whereas the pre-
>vious wire probably averaged 30-40ft. This new one came from
> some *really* lucky slingshots that sent my fishing weight into
>genuine tree tops. Avg. height now: Never less than 50ft,
>with a third of the length approaching 80ft plus.. Yumm!
>That's just about all the up I've got <grin>.
>
> I would like to ask the ng for some advice. I still have
>well over 60+ feet of wire (more if I splice) and two huge trees
>well placed at same heights but,..... This means turning a "L"
>shaped random wire into either a "J" or something very close
>to a Right Triangle-- depending on how far I bring the wire
>back to close the circuit. Still, I've read and heard talk of how
>anything that gets to be a "folded dipole" will actually LOSE
>gain. If I put up more wire I would get perhaps another 70-
>80 ft. in length and maintain same good altitudes. Thoughts?
>Reasons for your thoughts?
>
> Again my thanks,
>
> Andrew
> KG4JBM
>
>
>
>
>

>

999. Re: Dualband Base for Tree??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:14:58 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211458.09810.00000284@ng-ba1.aol.com>
Source record: 182010

anything will do

>Completely over looked freq range. I am looking for 2m/70cm.
>
>
>
>K I 5 F J <jenjoeo@zianet.com> wrote in message
>news:39a2ea27.0@oracle.zianet.com...
>> If you can bury twelve 33 ft radials around the tree and run up a 33 ft
>> wire a few inches away from the trunk you will have a better than average
>40
>> meter vertical that can be matched on other bands.
>>
>> K I 5 F J
>>
>> "Frizz" <senorpurpl@hotmail.net> wrote in message
>> news:8nsl7p$bs0$1@bob.news.rcn.net...
>> > What would be a small but decent dual or even tri band antenna for
>hiding
>> in
>> > a tree? I really need one that is easy to get up in a tree and that is
>> > easily hidden (ie nothing really big). What do you recommend and have
>> used
>> > in the past for stuff like this? I have antenna restrictions and have
>> heard
>> > many recommendations from hams on the air but have either forgotten the
>> > model numbers or have not been able to find the antennas they are
>talking
>> > about. Any tips? Thanks!
>> >
>> >
>> > KG4IVT.
>> >
>> >
>>
>>
>
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>
>
>
>

1000. Re: Car. RFI. Solution.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:15:39 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211539.09810.00000285@ng-ba1.aol.com>
Source record: 182014

very useful
even if not immediately useful

>I didn't know what single newsgroup to post this on; please forgive the
>multiple groups.
>
>Ever since I bought the car (a 1993 GMC pickup), there was a pulse-type
>digital noise audible on the AM receiver which raised the noise floor by
>10-20 dB. Maybe more. AM DXing was out of the question, and even in-city
>listening was frequently not possible or at least annoying.
>
>A few years ago, I tried removing the antenna to clean corrosion on the
>ground connection to the truck body. This seemed to me to help. I would
>guess that I may have lowered the offending noise by 2 or 3 dB.
>
>More troubleshooting over the years led to the discovery that the coax
>from the whip to the RF deck (mounted low in the dash approximately
>mid-cab) passed right behind the behind-the-glovebox computer. I guessed
>that this was the pickup mechanism, so I put several of those split
>ferrite cores around all of the leads in and out of the shielded CPU
>box. But this didn't work at all.
>
>I left it alone for a few years, and then last month something got into
>me to try one more time. I located the coax coming into the RF deck, and
>I took all of those split ferrite cores that were doing nothing and
>clamped them right over the coax cable where they entered the RF deck. I
>was able to fit four or five of them onto the antenna cable before my
>fingers just ran out of room trying to reach up into the dash. This
>worked so well that I took a long drive just to hear what the radio was
>doing! The receiver was so quiet it was astonishing. AM DX is now a
>definite possibility.
>
>Many of you will recognize that essentially what I did by using the
>split ferrite RFI suppressors is construct a kind of a W2DU balun. I
>posted this in the hopes that some of you suffering RFI in the car will
>benefit from this. Good luck!
>
>R,
>
>Al W6LX
>
>
>
>

>
>

1001. Re: Buutternut H9V question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:16:42 UTC
From: n4zou@my-deja.com
Message-ID: <8nv8lb$ul7$1@nnrp1.deja.com>
Source record: 181826

In article <mKmo5.13606$ZI2.813504@news1.rdc1.il.home.com>,
"Pete" <Pete@xyz.com> wrote:
> I am going to ground mount my antenna. The question I have is, do any
of you
> know if there is a
> tilt-over bracket I can buy for this vertical? We have restrictions
in our
> subdivision and I would like to hide the antenna when not in use.
Thanks
> for your information.

I just put information on my web page on how to build one. I dont know
of any one who builds them for sale. Good luck....
http://n4zou.homestead.com/files/tiltover.htm

Sent via Deja.com http://www.deja.com/
Before you buy.

1002. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:16:59 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211659.09810.00000288@ng-ba1.aol.com>
Source record: 182016

the first suggestion is enough
the second suggestion is never enough

>I would suggest plugging in the radio on a different electrical circuit as
>well as installing some good line filters.
>
>Siggy
>
>
>
>"Juan" <jherrero@videotron.ca> wrote in message
>news:39a19265.342802381@news.videotron.ca...
>> Hi
>> I have an small astronomical observatory 100Km North of Ottawa. In
>> order to measure asteroid occultations, reduce orbits and time other
>> astronomical events. I need to receive the UTC time signal. To that
>> end. I purchased a Grundig YB400PE radio. With it. I can best receive
>> channels CHU at 3330 and 7335. With transmitter located at about 110Km
>> South of the observatory.
>> Here is the problem. When I engage the telescope control drive. The
>> 24V pulse modulated stepper motors create an electronic clatter that
>> completely overrides the UTC signal. So I've been thinking of running
>> a coaxial wire to an antenna away from the observatory. When I started
>> to investigate the subject in the net. It quickly became apparent that
>> antenna design is a complex mater. Thus I wonder If some of you
>> experts could provide a simple antenna design to solve this
>> astronomer's noisy problem. Please note that although I have a decent
>> knowledge of electronics. I am a complete neophyte when it comes to
>> antennas.
>> Note: I have lots of trees around to use as mast if needed.
>>
>>
>> Thanks in advance.
>> Juan Herrero
>> Astronomy In The Great White North
>> http://pages.infinit.net/jherrero/
>
>
>
>
>
>
>
>
>

1003. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:17:47 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211747.09810.00000289@ng-ba1.aol.com>
Source record: 182018

30$
Why even think about it?

>I have recently run across the Matlab program (student edition) at what
>appears to be a very good price - $30.
>
>From the description, it is very similar to the Mathcad program which I
>have seen mentioned in postings on this NG. It is limited in matix size
>to a maximum of 32x32 but otherwise is fully functional as to graphing,
>equation solving, etc.
>
>Does anyone have any knowledge of or experience with Matlab that they
>would care to share?
>
>At $30, it is worth looking at, I know - just curious if anyone knows of
>it.
>
>--
>72/73, George W5YR - the Yellow Rose of Texas
>Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
>Amateur Radio W5YR, in the 54th year and it just keeps getting better!
>R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
>(12/99)
>
>
>
>
>
>

1004. Re: New ham needs help !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:19:49 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822211949.09810.00000290@ng-ba1.aol.com>
Source record: 181820

if you cant dig through it
then theres no point in digging through it

>Hi, I have a question about antennas. I have an ICOM IC-746 transceiver
>and I will be getting a combination 2/6/70cm antenna made by diamond
>antenna, and also the TITAN DX from GAP antenna. My question is about
>grounding them. I live in Las Vegas, Nevada and live on the side of a
>mountain so the ground is extremely hard. You could only dig down 6
>inches with a shovel before you needed a pick. I have been told that I
>need to drive an 8 foot ground rod into the ground. Since going down
>that deep is practically impossible, I was wondering if 4 feet would be
>sufficient? Also, where do I attach the ground wire to on the antenna?
>Do I attach it to the tripods they are mounted on, to the mast next to
>the antenna, or somewhere on the antenna itself, or all three? Another
>question I have is where do I place the lightning arrestor in the coax
>line? Is it placed as close to the antenna as possible, or inside the
>house close to the transceiver? I have one last question. Since I will
>be using TWO antennas, I will be using two coax lines for both of the
>antennas. Both of the coax lines will be 100 feet long, BUT is it ok to
>have the coax lines right next to each other or does there need to be
>some separation between the coax lines as I mount them along side the
>house? I will only be using one antenna to transmit at a time, so I was
>thinking I could keep them next to each other, but if you don't think I
>should, please tell me. Thanks so much for taking the time to read this
>and answer my questions,
>
>-Pete
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>
>
>
>
>
>

1005. Re: PUBLIC NOTICE: CEASE AND DESIST RICHARD CLARK

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:22:03 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822212203.09810.00000291@ng-ba1.aol.com>
Source record: 181822

fatal attraction?

>Why do I get this mental image of Nathan as resembling the character Charles
>emerson Winchester III, as portrayed on MASH?
>
>
>
>
>
>

1006. Re: Matching coil

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:23:08 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822212308.09810.00000292@ng-ba1.aol.com>
Source record: 181823

you should be giving advice
not asking for it

>Howdy Guys
>I have a Valor 40m whip that has a SWR of 1:6 to 1
>I had to wind a coil around a 2 inch piece of PVC pipe.
>I used number 14 bare copper and wound the coil using
>string trimmer line as a spacer and when the glue dryad
>I remover the line for a evenly spaced coil .
>It works ,but its sort of big .
>Can you guys give me so better ideas on making a coil ?
>
> Thanks
> 73 de ke4sll
>
>
>
>
>
>

1007. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:24:18 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822212418.09810.00000293@ng-ba1.aol.com>
Source record: 181824

if a wire is lousy
adding any two caps makes it better?

clue: no theory here

>Hello,
>
>I read many many years ago about a method of grounding a ham radio
>transmitter that is located on the second floor of a house.
>
>It involved using coax. The dc path for the ground was the center
>conductor. The "different" part of this method involved taking 0.001
>microfarad caps and connecting them at each end of the coax from the
>outer braid to the center conductor. There was no dc connection to the
>braid, but at each end the braid was connected to the center conductor
>via the 0.001 microfarad caps.
>
>This was supposed to make a better rf ground for the radio located on
>the second floor.
>
>Does this make sense? What principal is in effect that makes it "sense?
>
>Thanks in advance.
>
>Jim
>*
>
>
>
>
>
>
>

1008. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:27:53 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822212753.09810.00000294@ng-ba1.aol.com>
Source record: 181825

wonton boys?
chinese soup?

>I just recently re-tuned by 75 meter quarter wave sloper to work on a
>higher part of 75 meters (from about 3675 to about 3900). I did this
>with the aid of an MFJ antenna analyzer. Everything went fine with the
>usual "tune, cut and shorten the antenna, and retune" recipie. Then I
>hooked the coax back into my 2-position antenna switch box and all was
>working well.
>
>then I plugged up my other HF antenna (a half wave 10 meter vertical)
>back into the other position of the antenna swtchbox, and this action
>alone made the resonant frequency of my sloper drop by about 90 to 100
>kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax
>out of the 2-pos switch box, the resonant frequency of the sloper climbs
>back from 3810 back up to 3900.
>
>one friend suggested that maybe my sloper isn't grounded well enough
>(the tower/pole a slower is mounted to is suppose to act, itself, as
>the counterpoise of the antenna). I would like the thoughts of everybody
>else out there.
>
>My half wave vertical is an antron-99, and a couple of feet below the
>place it is mounted to is where I have the top of the 75/80 meter sloper
>mounted. Both coaxs run along side one another down the mast and tower
>to my station, for further information.
>
>
>--
>"As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>
>
>
>
>
>
>

1009. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:28:06 UTC
From: n4zou@my-deja.com
Message-ID: <8nv9aivbn1@nnrp1.deja.com>
Source record: 181827

In article <b6h2qso61oiqsl48po19l8tni4p3oarj7v@4ax.com>,
Duane Smith <jwbest@earthlink.net> wrote:
> On Sun, 20 Aug 2000 05:35:59 GMT, Duane Smith <jwbest@earthlink.net>
> wrote:
> Thanks to all who answered my reqest. Next question; will a 63 pf
> cap work? I can buy that for $2 or the B'nut version for $28.

It will work just fine! You might need to retune the coil a small
amount but you might find it works just the same as it was before the
Butternut capacitor got broken.

> >The 40 meter capacitor on my HF6V is broken. Does Butternut
> >have a web page? Anyone know the value of the capacitor? I would
> >even take one off of a junked Butternut. Thanks for any help.
> >
> >Jim N7CLV
> >jwbest@earthlink.net
>

I just posted a new page on my site. It shows how to build a tilt
over base for the Butternut vertical antenna. The address is..
http://n4zou.homestead.com/files/tiltover.htm

Sent via Deja.com http://www.deja.com/
Before you buy.

1010. Re: Verticals and trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 01:44:06 UTC
From: n4zou@my-deja.com
Message-ID: <8nva92$j7$1@nnrp1.deja.com>
Source record: 181828

In article <qgFo5.87981$oj6.1590142@news1.rdc1.tx.home.com>,
"Bruce Winkelman" <bdwink@home.com> wrote:
> After 2 brief, disastrous affairs with verticals from GAP and
Moseley, I
> have decided to return to my first vertical love, the Butternut. A
tower
> and beam, however desirable, is not possible at present. Hope to put
up a
> new Butternut, either the HF2V or HF6V before the first of October.
My old
> vertical mounting pipe has moved closer to trees than it was 15 years
ago
> (the trees grew and new ones planted). If I reuse the old pipe
mount, the
> vertical will be within 3 feet of branches on the west side of the
yard and
> within 15 feet of branches to the northeast. Should I worry about the
> proximity of the trees? What effect will the trees have at HF?
Should I
> just forget about it and have fun? Any advice, suggestions,
experiences
> greatly appreciated.
> Bruce Winkelman AA5CO Tulsa, OK
I had a Butternut HF2V vertical on a 30 foot pole with the element
going up between tree limbs. Some were as close a 3 feet to the
element. I did guy off the vertical element to keep it from swinging
around in the wind and hitting the tree limbs. I made contacts all over
the place and even DX on 40 and 80 meters. My ground system consisted
of 16 full 1/4 wave radials, 8 for 40 meters and 8 for 80 meters. These
were above ground radials also 30 feet above ground. I used aluminum
electric fence wire and insulators made just for it. I think the ground
system has more effect in performance than trees close by .

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Before you buy.

1011. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:03:03 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822220303.09810.00000297@ng-ba1.aol.com>
Source record: 181829

but then you could probably smell the coffee

>I just couldn't get out of bed in the morning knowing that many people hated
>me.............
>
>Fractenna wrote:
>
>> >NC:
>> >
>> >What *would* lead in some way to your contributing to a new chapter in the
>> >history of this NG, by simply leaving it?
>> >
>> >Would you consider entering democrat politics, where your desires to
>> >demonize the holders of opposing opinions, and your tiresome bloviations
>> >about vast conspiracies, lawsuits, and victimhood, would probably find an
>> >eager
>> >audience?
>> >
>> >Can we help you find your way out, pls?
>> >
>> >Why would a person such as yourself want to subject himself to the milieu
>> >you describe?
>> >
>> >Take your own excellent advice.
>> >
>> >Stop reading the materials here.
>> >
>> >Stop posting to the NG here.
>> >
>> >Go away to the dot-com you have created and stay there.
>> >
>> >We here have enough intestinal and other fortitude to do without your
>> >presence on the NG.
>> >
>> >We do not wish you ill.
>> >
>> >We wish nothing more than for you to get out, stay out, and don't come
>back.
>> >
>> >Is there any part of 'get out, stay out, and don't come back' that you do
>> >not understand?
>> >
>> >If so, ask your attorney to explain the phrase.
>> >

>> >Take fill dirt, the Zero Knowledge Transferable character, with you.
>> >
>> >K3BHJ
>> >**********
>> >
>> >NC bloviated, in part, somewhere, about this NG:
>> >
>> >Copyright violation; impersonation; libel;prevarication about proper
>> >copyright
>> >and pending patent notification; misleading and incorrect assessment; and
>so
>> >on
>> >will NOT lead in any way to my leaving this NG.
>> >
>> >If you do not wish to read the materials, then don't.
>> >
>> >What has resulted from this abuse is a new and global interest in exactly
>> >the
>> >kind of mischief that has been promulgated here. I will actively assist
>any
>> >and
>> >all scholars, legal types, and press who want to investigate this active
>> >attempt to destroy a new technology and the inventor and company that go
>> >with
>> >it.
>> >
>> >To my knowledge, this is a new chapter in the history of the internet.
>> >
>> >NC
>> Dave,
>>
>> Life is an adaptive system.
>>
>> Accept the fact that this is a big world, and not everyone will like you,
>and
>> visa versa.
>>
>> But that gives no one the right to use whatever steps--such as:
>impersonation;
>> accusations of fraud; accusations of mental illness; accusations of bizarre
>> sexual engagement; copyright infringement; inaccurate and deliberately
>> misleading data comparisons; threats of getting someone fired; and on and
>on
>> (just of the few of the issues in the last month) to IMPOSE one's will of
>> 'getting someone off the newsgroup'.
>>
>> I am here to enjoy myself and provide accurate and cogent info. As long as
>I am
>> capable of this, I am happy to be here.
>>

>> Hope this helps.
>>
>> 73,
>> Chip N1IR
>
>--
>The preceding may or may not have been authored by myself but I offer it to
>you for
>your perusal.
>Feel free to read as little or as much of it as you like. Be forewarned that
>I
>refuse to use a
>spell checker and don't take criticism well.
>
>
>
>
>
>
>
>

1012. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:05:19 UTC
From: Bruce Anderson <w1lus@att.net>
Message-ID: <39A2F8F5.5B4540BF@att.net>
Source record: 181830

When two resonant circuits of the same frequency are tightly coupled
they will tend to interact. One of the effects is a slight shifting of the
circuits resonant frequency. Since the other antenna is supposed to be a 10
meter antenna they should not interact. But since they do it probably means
that the 10 meter antenna and it's coax lead resonate on 80 meters and that
is the circuit reacting with your sloper. Try adding a 1/4 wave length of
coax to the 10 meter antenna. I think that may cure the problem.

W1LUS

rattlehead@my-deja.com wrote:

> I just recently re-tuned by 75 meter quarter wave sloper to work on a
> higher part of 75 meters (from about 3675 to about 3900). I did this
> with the aid of an MFJ antenna analyzer. Everything went fine with the
> usual "tune, cut and shorten the antenna, and retune" recipie. Then I
> hooked the coax back into my 2-position antenna switch box and all was
> working well.
>
> then I plugged up my other HF antenna (a half wave 10 meter vertical)
> back into the other position of the antenna swtchbox, and this action
> alone made the resonant frequency of my sloper drop by about 90 to 100
> kc's (from 3900 to about 3810 or so). when I unscrew the vertical's coax
> out of the 2-pos switch box, the resonant frequency of the sloper climbs
> back from 3810 back up to 3900.
>
> one friend suggested that maybe my sloper isn't grounded well enough
> (the tower/pole a slower is mounted to is suppose to act, itself, as
> the counterpoise of the antenna). I would like the thoughts of everybody
> else out there.
>
> My half wave vertical is an antron-99, and a couple of feet below the
> place it is mounted to is where I have the top of the 75/80 meter sloper
> mounted. Both coaxs run along side one another down the mast and tower
> to my station, for further information.
>
> --
> "As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1013. Re: Fracsybil likes to post email

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:08:37 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822220837.09810.00000298@ng-ba1.aol.com>
Source record: 181831

need a sleep aide?

>List,
>Can anyone tell me whether they have been contacted by NC's
>lawyers/attorneys/legal eagles re his threat to sue/admonish/etc????
>
>Would be interesting to compare notes
>
>John McLean
>VK2KCE
>Australia
>...
>>
>> I laugh in your face Nathan. I have no obligation to send squat to
>> your virtual attorney.
>
>
>
>
>
>
>
>
>

1014. 5 Band Unknown Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:14:02 UTC
From: Brenda & Bill Beal <bbeal@home.com>
Message-ID: <39A33395.73C2FFB6@home.com>
Source record: 181832

Recently I posted a couple of questions thinking I have a Hy-gain vertical. An individual advised me to check for part numbers. I have really looked over the whole thing and can find no part numbers. I'm trying to get a fix on what brand and model it might be. It is 5 band (4 trap) antenna about twenty five feet high. There is mix of boots on the traps. Some are a thin black plastic while others are a heavy rubbery plastic (maybe a replacement). The trap insulators are a cream/white plastic, have three interconnected sections, and appear to hav a single screw connecting the outer part to the antenna. There was a capacitive hat that is now lost. It appears that it was mounted on the 20 meter section but that just might be that the clamp was put back there by mistake. The base of the antenna is a 2 in diameter piece of aluminum tube. The active part of the antenna mounts into it with a black plastic or hard rubber section to insulate it. The connector is a UHF connector with a black plastic tube protecting the condutor up to the contact with the active portion.

I am just getting back into ham radio after about 10 years during which this antennas sat around the garage and hung on the fence. I need to make/get a new capcitive hat, attach it in the correct position, and tune this thing up. Any further help appreciated.

Bill, WD5HHH

1015. Re: 59 MHz dual dipole help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:15:09 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822221509.09810.00000300@ng-ba1.aol.com>
Source record: 181833

sorry to have a fool answer your question
BUT
the experts dont have time for you

think in terms of 100 inches for any dimension question

nothing else will matter much

>I want to build a 59 MHz dual dipole antenna for solar radio astronomy
>purposes and have a bunch of questions.
>
>Can anyone help me with the dimensions in feet and inches please?
>
>1. What is the correct spacing distance between the two dipoles?
>
>2. What is the correct length for the coax pieces (RG-58) from each di
>ole to the center feedline union? (I am not sure of the velocity facto
> of this Radio Shack coax.)
>
>3. Is the length of feedline from the dipole union
>into the radio a critical measurement?
>
>4. What is an acceptable height above the ground?
>
>5. Are ferrite toroids necessary for an antenna like this?
>
>Thanks for any help.
>
>Tom Ashcraft
>72632.1427@compuserve.com
>
>
>
>
>
>

1016. Re: What's all this Fractenna stuff???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:17:20 UTC
From: tylleulenspiegel@aol.com
Message-ID: <20000822221720.09810.00000301@ng-ba1.aol.com>
Source record: 181834

if you can spell it
thats all you need to know

anything more qualifies you as guru

gurus are cheerfully crucified here

>I really don't get it. What is all this Fractenna stuff about. I've
>been watching this news group for a while trying to learn a few things
>from people's input on antennas, and all I read is this stuff (could
>have used a more aromatic word here to describe it) about Fractenna,
>lawsuits, patents, and God knows what. Why don't you all just ignore
>him. All you're doing is feeding him (or them... I haven't really
>figured it out) with a reason to argue and a whole string a subsequent
>replies and more name-calling and bitching...
>
>This seems like poison ivy, scratch it and it still itches but spreads
>like crazy, ignore it and soon enough it will go away... hopefully.
>
>
>
>
>
>
>
>

1017. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:39:12 UTC
From: k6mhe@arrl.net
Message-ID: <39a3388a.6169416@news.mcn.org>
Source record: 181840

On Wed, 23 Aug 2000 01:05:35 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Tue, 22 Aug 2000 23:37:39 GMT, k6mhe@arrl.net (Dan Richardson)
>wrote:
>
>>
>>Yes, but don't try it on 9913!
>>
>>Danny
>
>Why Danny?

Hi Tom,

I think you will find that it dribbles down inside the 9913 and is no
longer sealing *by flooding* anything. The flooded area of the
connector is no longer flooded and the whole thing is a bummer.....

Danny

1018. Re: Antenna Restrictions and Covenants

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:39:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8nvdhm$p10$0@208.206.142.110>
Source record: 181835

Bill Turner wrote:

> On Sun, 20 Aug 2000 04:29:00 -0700, Will <wcwhite@mindspring.com>
> wrote:
>
> >No thanks! I am moving to
> >Seattle at the end of the year, and hope to be in the home shopping mode
> >withing 2 or 3 years after that, and from my preliminary research, CC&Rs
> >will not be a problem.
> ----------
>
> Beware of Seattle - when I lived there a couple years ago, there was a
> 50-foot height limit on towers inside the city limits.

Don't expect relief by moving to outlying areas, either. Couple years ago relatives lived in Maple Valley (a SEA-TAC 'burb) in a newer subdivision with all underground utilities and services that has a CCR that said nary a word about antennas nor towers. It merely stated that homeowners would not "install additional transmission lines of any type" (!)
I do believe that would take care of it wouldn't it?

73, Dick W0EX

1019. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:48:03 UTC
From: John & Deb <jminners@worldnet.att.net>
Message-ID: <388A75E1.797E@worldnet.att.net>
Source record: 181836

TyllEulenspiegel wrote:
>
> only a problem when you approach the aluminium
>
> >I posted this question under another topic but never got an answer. I 'll
> >try again.
> >Can one use Ladder line on a Aluminum sided house with storm
> >windows???? I understand that the desire is to keep the line away from metal
> >whenever possible.
> >Perhaps the question is dumb but I'm really interested as I'd like to run a
> >Long Wire outside
> >but getting back into the house seems like it might be a problem????????
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >

Thanks alot for all the replies. Keeping it 2 - 3 inches away from the metal surfaces will not be a problem till I have to enter my 2nd floor Storm Window. Oh well ... perhaps some experimentation is in order. I'm just curious how other hams have handled this. I can't be the only one.... geez I hope not :(73 ---------- John

1020. Re: 2m antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:50:29 UTC
From: glc1173@aol.com
Message-ID: <20000822225029.10498.00000429@ng-co1.aol.com>
Source record: 181837
Body handling: HTML body converted to readable text

T. Sanders wrote:
>A relative gave me a nice little homemade >quad antenna that he used on 2m.
>I have a simple question: How do I mount >and orient this antenna? Should I
>attach it to a rotor or is it >omni-directional?

It's not omnidirectional.
How "directional" it is depends on whether it has additional elements.
Lots of 2M operators use "quagis" with several straight dipole directors out
front and one reflector dipole behind the driven quad.
You can use it without a rotor - if you either don't mind using it just in
one main direction or are using it indoors or in some other way it's convenient
to rotate it by hand.
N4GSV
~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, nationwide weather
Al Gore - in his own words
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

1021. Re: Vertical radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 02:52:56 UTC
From: raiar@slacc.com.nospam
Message-ID: <39a33aca.11079645@news.galilei.com>
Source record: 181838

Dang Bruce

You sound about as bad as meeeeee......

My backyard is almost solid copper, hi hi.....

I've moved antennas all over the yard, and in the process of burying new radials, whenever I hit and old one I strip the insulation, tie to it and spray some enamel on it, actually plasti-dip-your-grip on it.

I did something really really crazy and danged if it didn't work. From the approximate location of where an antenna used to be, I went out about 10 feet and layed a ground radial in a circle, connecting it to each of the original radials, touching only one wire of the old radial bed, which was centered about 25 feet away from the new antenna, made a big enough difference I could see it on an S meter on receive, didn't have any regulars on the air at that time to check the TX side for a difference, besides, I wanted to get the new radials in anyhow before dark, and if I get on the radiola and start ratchetjawing I'de never get those radials in, hi hi.....

I figure, wires cheap, about a penny a foot, and it only takes about 10 minutes per 100 feet to plant the stuff a couple of inches deep, so as always, I go hog wild with radials.

TTUL
Gary

1022. Re: Project Skywire: No More!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 03:26:09 UTC
From: cathexis@erols.com
Message-ID: <39a34340.73763268@news.erols.com>
Source record: 181839

On 23 Aug 2000 01:13:17 GMT, tylleulenspiegel@aol.com (TyllEulenspiegel) wrote:

>upagain downagain finnegan
>
>at least ur doing something

Yes, and I've got the monofilament cuts on
my fingers to prove it. I kinda enjoy firing off that
cheap Wal-Mart wrist rocket, though I've so far
resisted to urge to take out some squirrels. <grin>
One of them didn't like the weight thwacking into
his tree and tried to charge it- until I started tugging
on the line which sent the whole limb swaying.
Chortle, chortle.
>
>>Greetings,
>>
>> That's right; 24 hours after I put it up I took it down.
>>Reason? The east leg of wire was barely over the roof and
>>worse, 10ft. from my power line. Though trees were good,
>>no insulators or tie-offs were used and I felt this posed an
>>un-acceptable risk. Had that leg of the circuit snapped the
>>only place it could have gone is sliding off the roof to drape
>>on the power lines. I refused to take that chance.
>>
>> But,.....Now there's a new wire! Haven't even really
>>checked it out yet. Will have to see about previously mentioned
>>BCB RFI. There are pluses and minuses to this wire. First it's
>>no loop, just a random wire. Only 130ft. approx, not the 200ft.
>>of earlier one. One nice advantage: Height! Whereas the pre-
>>vious wire probably averaged 30-40ft. This new one came from
>> some *really* lucky slingshots that sent my fishing weight into
>>genuine tree tops. Avg. height now: Never less than 50ft,
>>with a third of the length approaching 80ft plus.. Yumm!
>>That's just about all the up I've got <grin>.
>>
>> I would like to ask the ng for some advice. I still have
>>well over 60+ feet of wire (more if I splice) and two huge trees
>>well placed at same heights but,..... This means turning a "L"
>>shaped random wire into either a "J" or something very close
>>to a Right Triangle-- depending on how far I bring the wire
>>back to close the circuit. Still, I've read and heard talk of how
>>anything that gets to be a "folded dipole" will actually LOSE
>>gain. If I put up more wire I would get perhaps another 70-
>>80 ft. in length and maintain same good altitudes. Thoughts?

>>Reasons for your thoughts?
>>
>> Again my thanks,
>>
>> Andrew
>> KG4JBM
>>
>>
>>
>>
>>
>>
>
>

1023. Re: Astronomer needs antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 03:36:20 UTC
From: k1bqt@aol.com
Message-ID: <20000822233620.06174.00000934@ng-mf1.aol.com>
Source record: 181841

Tyll wrote:

>the first suggestion is enough..<

Enough for me to turn on the spiegel filter. Thank god, it works really well
for assholes like this acne trap!

Rick K1BQT

1024. Re: Verticals and trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 04:01:12 UTC
From: ab351@FreeNet.Carleton.CA
Message-ID: <8nvia8$s37$1@freenet9.carleton.ca>
Source record: 181842

"Bruce Winkelman" (bdwink@home.com) writes:
> After 2 brief, disastrous affairs with verticals from GAP and Moseley, I
> have decided to return to my first vertical love, the Butternut. A tower
> and beam, however desirable, is not possible at present. Hope to put up a
> new Butternut, either the HF2V or HF6V before the first of October. My old
> vertical mounting pipe has moved closer to trees than it was 15 years ago
> (the trees grew and new ones planted). If I reuse the old pipe mount, the
> vertical will be within 3 feet of branches on the west side of the yard and
> within 15 feet of branches to the northeast. Should I worry about the
> proximity of the trees? What effect will the trees have at HF? Should I
> just forget about it and have fun? Any advice, suggestions, experiences
> greatly appreciated.
> Bruce Winkelman AA5CO Tulsa, OK
>
>

Bruce,

Personally, I'd suggest you "forget about it and have fun". As long as
none of the twigs or leaves actually touch the antenna, the
nearby trees will likely be less critical than the ground system.

I believe you mentioned in another post that you have at least 8 ground
radials, of some reasonable length. The more radials the better; likewise,
the longer the better. But the law of diminishing returns applies here. If
you can hook up more radials, good, but just because you haven't reached
the "optimum" doesn't automatically mean you won't be happy with it. By
the way, I would guess that wires in the ground that aren't electrically
connected to the base of the antenna will probably have much less effect
than the ones that are connected.

You also asked about using an 80/40 antenna on 15. It might not work the
way you expect. Think about a typical trapped antenna. The bottom section
is resonant on the higher band (40 in this case), then there is a trap,
which is generally an L and C in parallel such that the product L*C makes
the trap resonant on the higher band (i.e. very high impedance on that band),
and a top section. On the lower band, the trap is non-resonant and looks
like an inductance in series with the top section. The length of the top
section is just right to make the whole thing resonate on the lower band.
Now, what happens on a higher frequency, say 15m? The trap is not
resonant there. In fact, the designer has a degree of freedom (the L/C
ratio), so the trap's impedance at 15m can be, within limits, whatever
the designer wants. If he had operation in 15m in mind, fine, but if
not, the impedance of the antenna on 15 is unpredictable. If your
antenna doesn't use traps, this argument may not apply, but there is

probably an analogous thought process you can go through to predict how it might behave. Or, of course, you could try mathematical modelling (a computer program like EZNEC).

Now resonance is not necessary. With a reasonably low-loss feeder and a tuner, you may be able to load the thing successfully even on bands where it is far from resonant. However, the radiation pattern may not be what you had hoped. With a vertical antenna electrically longer than 1/4 wavelength, you might be radiating most of your power at higher angles than you want. Again, modelling might be instructive. Another possible side-effect of loading an antenna on a non-design frequency might be excessive voltages or currents in the traps. I have heard that this can be a problem with some commercial multi-band verticals.

My own experience is with a 5-band ground-mounted trap antenna. It's about 15 feet from the house (aluminum siding), 12 feet from a crabapple tree, and 4 feet from a lilac hedge. I keep the branches trimmed back far enough that the wind doesn't bring them into contact with it. I have 32 radials, insulated wire, of various lengths. Some are as long as 70 feet, some as short as 6 feet, but I am now convinced that the distant portions of the long ones are doing very little good; I believe it's the density of radial wires closer in that matters most.

As they say, this antenna radiates equally poorly in all directions. All too often I can hear other hams in the neighbourhood breaking pile-ups when my signal is just too weak to compete. But that doesn't mean I can't enjoy DXing, contesting, and other aspects of ham radio. In fact, I've worked 5BDXCC with this antenna (100 watts, CW).

If you've gotta outperform the other guy, you won't be happy until you have a tower and beam, but if you can live with a restricted level of performance and set your goals accordingly, you can still have fun working the world.

73, Rich
VE3IAY

--
Richard Ferch (ab351@freenet.carleton.ca)

1025. Minimum-Loss-Pad design or tables

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 04:07:10 UTC
From: Winton Bell <w.bell@psyc.canterbury.ac.nz>
Message-ID: <39A34DEE.7F57@psyc.canterbury.ac.nz>
Source record: 181843

Hi,

I would greatful for information on minimum-loss-pad design/tables
for calculating a pad to match 50-ohm and 10-ohm.

Thanks,
Winton, ZL3AO

1026. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:00:14 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <yTIo5.3504$x16.249336@monger.newsread.com>
Source record: 181844

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Den" <dennis.spiess@reckitt.com> wrote in message
news:8ntj2muje1@nnrp1.deja.com...
> Roger:
> Hi, Just a comment, I have found that any attempt to 'seal' a
> connection using silicone and or caulk led to problems with water
> getting into the connection and causing lots of problems as it could
> not get back out. Over time, I have found that somewhere the silicone
> will leak, usually between it and another surface. Capillary action
> just draws the water in!

One thing to remember about the silicon RTV compounds is that they are not moisture proof. Moisture can get in and then condense and the only way out is as vapor.

I in 9913 type cables I use the "Dielectric Grease" and fill the connector. That sutff is good, unfortunately it is both difficult to find and expensive.

Typically on the outside I use the "Liquid Electrical Tape" made specifically for Marine installations. It's easy to use, and relatively inexpensive.
Life in the can, once opened is not real good, but I have some connectors (splices) that have been out in the elements over 6 or 7 years now.

Roger (K8RI)

<whole bunch snipped>

1027. Re: Guying towers and moment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:06:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <7ZIo5.3505$x16.249779@monger.newsread.com>
Source record: 181845

I think "we" came up with a simple solution although it requires a bit of work, welding, and painting, as well as a bit of money.

I'm going to add a right triangle to the side of the post that faces the tower.
It will be 3 feet high and 3 feet across the base with 4" I-beam welded in as the hypotenuse which is roughly 4 1/3 feet.

The top two tier of guys will anchor to the top of the upright.
The base will be bolted to the concrete and the back rails of the upright I-beam will be welded to the 5" pipe.

This puts most of the welds in compression mode and puts a very hefty brace against the pull of the guys.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:BsSn5.2155$kM2.265494@newshog.newsread.com...
> > On Sun, 20 Aug 2000 02:21:35 GMT, "Roger Halstead" <rdhalste@tm.net>
> > wrote:
> > .
> > >As I recall the bending moment is around 4500#
> > >But will drop to about half that with the top two tier being moved to
the
> > >concrete.
> >
> > ???????
> The force from the top guy, although considerably more than the bottom
set,
> is
> mostly vertical and wind load is quite small at present.
>
> If I move the top two tier of guys to the concrete the mast gets very
little
> load beyond the guy tension which is 400# for the bottom two sets.
>
> >
> > The 1/4 inch EHS alone is rated at 6600 lbs, and that force would be
> > applied at the top of the tall skinny cylinder used to support the guy
> > lines.
>
> I'm using the equivelant Phillistrand at 6000# and pretensioned to 600#,
but

> if
> the load ever approaches 6000 # pull on the line it will have long since
> passed
> the survival point for the antennas, let alone the tower, or anchors.
>
> A 25 sq ft antenna would add 520# of "side" load with an 80 MPH wind.
> That would equate to quite a pull.
>
> I know the system as is will work as I've had one up for nearly 15 years,
> but I
> want to go with larger antennas and am working toward understanding how
much
> I
> have to beef up the guy anchors, or modify them.
> The biggest problem is that with such a substantial system I'm tempted to
> push
> the limits with bigger antennas, but have no idea as to what those limits
> are
> and how much the different mods will raise them.
> I only know enough engineering (as I said, I'm a retired computer jockey
and
> project manager with a math minor) to realize I need to ask lots of
> questions
> about specific areas.
>
> I do understand the mechanics involved, but don't have the background to
do
> the
> actual figures for much of it.
>
>
> >
> > I'd calculate the forces at ground level in that pole. I think you'll
> > be amazed at the tension on one side and the compression on the other.
> >
> > I'd never use a guy support like that without back-guying the mast.
>
> Back guying is not an option, but I can front brace them even using
I-beam,
> or
> two I-beams in an "A" frame configuration..
> And as I said I can move the top level, or two upper levels to anchor at
the
> concrete which would probably remove the need to reinforce the posts
except
> for
> pouring them full of concrete.
>
> > Filling the center is OK for keeping it from kinking in, but I suspect
> > the tinsel strength won't increase much. You need a mechanical

> > engineer, try subscribing
>
> The Civil engineer (for the township)came out to look over the
installation,
> said it looked fine and signed off, but he didn't give me any figures and
I
> didn't get a chance to show him what I want to use to replace the small
> tri-bander.
> He did remark that if that old installation, which is still standing, had
> lasted
> 15 years, that the new one should be imortal.
>
> BTW, almost all of the tower movement is now gone as the Phillistrand
sets.
> I can climb by just snapping the pole strap up the back side which
produces
> quite a sideways impact on the tower. And...no, at my age I can not do
the
> whole 100 feet that way...even if I didn't have to unhook to get around
the
> guys
> <:-))
>
> > "towertalk@contesting.com". The nice thing
> > about that group is you-know-who is banned (or was a year ago), so the
> > F word is never used and you don't need filters.
>
> I will, and thanks Tom.
>
> 73
>
> Roger (K8RI)
>
> Hope this works ...I accidentally hit reply and it bounced
> >
> >
>
>
>
>

1028. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:09:21 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A35C77.EDD03767@att.net>
Source record: 181846

I can imagine that it must take you hours to come up with these snappy,
pithy, knowledge-laden quips.

Clearly, the length of your postings is linked irrevocably to the depth
of your understanding.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

TyllEulenspiegel wrote:
>
> 30$
> Why even think about it?

1029. Re: Nice NG?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:11:34 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A35CFD.EFE871C8@att.net>
Source record: 181847

Or, most fundamental of all:

"Play nicely with others . . ."

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

"Peter O. Brackett" wrote:
>
> Hey....
>
> ROFL....
>
> I'd like to get some of that ethic inculcated into me too.... maybe my Ford
> would run better on ethic.

1030. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:28:36 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8nvnkh$784$1@slb0.atl.mindspring.net>
Source record: 181848

George:

I use Matlab a lot in my work. Paid full price for it and for several of the toolboxes. Many thousands of dollars.

Matlab is basically a "Matrix Laboratory". It is heavily oriented towards vector and matrix operations, and was derived from a set of linear algebra packages.

It has it's own interperted language and can be used to rapidly build and run complex simulations of various kinds. You can build your own models using the vector matrix interpertative language or use lot's of ready made models/simulations from the large variety of application specific toolboxes.

The toolboxes are often developed by third parties and sometimes separately supported and/or supported by the MathWorks. I/we have developed a number of our own toolboxes which we use for the particular kinds of simulations that we do.

All of this MatLab stuff is very expensive at the professional prices. I [my employer] has provided almost $10,000 in Matlab and tools for my/our use. I do a lot of DSP analysis and design and multi-channel communications simulations including cross-talk etc... with Matlab.

It saves me/us a lot of time and money for what we would otherwise have to do a lot of specific lower level programming for probably many manyears and so it is worth it to us in terms of productivity with vector matrix programming.

George, if I was an amateur user, I would go with something else such as SciLab or Ptolemy or RLab, or similar.... which are generally free and which also have a large set of "free-ware" applications available on several WWW sites. Of course many feel that the ultimate math package is Wolfram's Mathematical... everyone to their own taste.

Even if you get the basic Matlab student edition cheap you really need the more expensive toolboxes to do stuff quickly. And by the time you buy all of the toolboxes that you need you are again talking "real money".

MathWorks has a WWW site devoted to the use of Matlab and you can find out more there.

BTW... MathWorks trades on NASDAQ under the symbol MATH.

Although it can be used to do most of the things that you might do with MathSoft's MathCad it is quite different from MathCad and more difficult to learn. I also have MathCad and use it for simpler things that do not require a lot of vector matrix manipulation.

If I was an amateur user I would probably prefer MathCad.

Hope this helps...

Peter

--
Peter O. Brackett
Morrisville, NC
--
George , W5YR <w5yr@att.net> wrote in message
news:39A17869.4CA69F12@att.net...
> I have recently run across the Matlab program (student edition) at what
> appears to be a very good price - $30.
>
> From the description, it is very similar to the Mathcad program which I
> have seen mentioned in postings on this NG. It is limited in matix size
> to a maximum of 32x32 but otherwise is fully functional as to graphing,
> equation solving, etc.
>
> Does anyone have any knowledge of or experience with Matlab that they
> would care to share?
>
> At $30, it is worth looking at, I know - just curious if anyone knows of
> it.
>
> --
> 72/73, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 54th year and it just keeps getting better!
> R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
> (12/99)

1031. Re: Matlab

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 05:41:06 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8nvo9i$sjb@nnrp3.farm.idt.net>
Source record: 181849

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39A3016C.8B0FDE8A@mwci.net...
> If I disseminate a Mathcad worksheet, like in an article, I make it as
generic
> and simple as possible so that the most basic versions can be used. If
there is
> a version conflict the reader can easily type in the material using his
own
> version.

Some of the people I exchange worksheets with use all different versions of the software. I need to use the features in some of the later versions, and I find it a real pain trying to figure out if the person I am sending a worksheet to can run it on their version of Mathcad. Mathsoft had not made this particular problem easy to deal with.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

1032. Re: Remember those GOTHAM verticals...???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 06:27:28 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <39A36ED0.15E7E5B9@amsat.org>
Source record: 181850

They sold CHEAP aluminum tubing! Mine folded up like a pretzel one
winter, and all my friends with Hy-Gain or Butternut verticals had no
such problems.
73, Jim
.........oh yeah....it didn't work very well, either. My first lesson in
"You Get What You Pay For"

1033. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 06:44:53 UTC
From: n8wwm@aol.com
Message-ID: <20000823024453.24191.00001529@ng-me1.aol.com>
Source record: 181851

you are still pompous..as if to assume that anyone is entertained by your crap

1034. Re: Another perspective RE: Fractenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 06:46:57 UTC
From: n8wwm@aol.com
Message-ID: <20000823024657.24191.00001530@ng-me1.aol.com>
Source record: 181852

I am not teresa

1035. Re: Balun for a all-bander dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-23 23:02:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8o1lka$q5v$1@plutonium.btinternet.com>
Source record: 181803

Hello Darryl,

In principle, a 9:1 transforms 450 ohms down to 50 ohms. A 4:1 transforms 450 ohms only down to 113 ohms.

But in practice the impedance looking into the 450-ohm feedline is never anywhere near 450 ohms because the antenna impedance is never a pure resistance of 450 ohms.

So there's no such thing as the correct transformation ratio for a balun. Its main function is to preserve the balance on a balanced line when it's connected to an unbalanced line or equipment.

Its a matter of chance whether the 160m band will become available when changing to a 9:1 balun. If the antenna manufacturer says it will then the odds are in your favour. But you may lose 1 or more of the higher frequency bands.

Before you buy or make a 9:1 balun (a simple job) you may find lengthening or shortening the 450-ohm feedline will be all that is necessary when using the 4:1 balun. Just use the length of the line itself as a transformer.

Your antenna + feedline can be modelled using program DIPOLE1 available from my website. Vary the feedline length and it will tell you whether your feedline needs to be lengthened or shortened. When using the 4:1 balun you would like to see a pure resistance of 4*50 = 200 ohms looking int the 450-ohm feedline.

On the other hand, if the resistance looking into the feedline can be made 50 ohms, all you will need is a 1:1 choke balun which is even easier to make yourself on a 2" diameter ferrite ring. Input resistances anywhere between 37 and 67 ohms or between 150 and 270 ohms will be fine for 160m

You don't say whether you have a tuner or not. That will influence the direction you should proceed in if experiments with feedline length are unsuccessful for 160m.

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Darryl Wagoner <darryl@shecora.com> wrote in message

news:39A4257E.66EB4770@shecora.com...
> Greetings,
>
> I picked up a all bander dipole from HRO and found out
when I was
> setting it up it didn't have
> a balun on it. There is 100' of 450 ohm ladder line. HRO
said I needed
> an 9:1 balun, but
> a 4:1 would work as they didn't have 9:1 in stock. I put
on a 4:1 from
> my G5RV and it
> seem to work well from 80-6, but 160 was out of the
question. Will
> getting a 9:1 balun
> correct the problem of not being able to tune 160? The
specs says it
> goes from 160-10
> and didn't say anything about 6.
>
> What should I do? Kept the 4:1 or go for the 9:1?
>
> thanks
> --
> Darryl Wagoner DE WA1GON
> 603-324-2151

1036. ground resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <iv7p5.845$_X.3338@newsfeed.slurp.net>
Source record: 181815

Is there *any* way in which part or all of the 'earth-ground-resistance' equivalent can be made to appear between the source and vertical radiator, rather than in series with the 'spatial connection' between the radiator and 'earth-ground'?

For years, I have approximated 'earth-ground-resistance' by putting a variable resistor between eg the radial termination point (the 'earth-ground-lead') and the coax braid, and adjusting for 0.5 of the initial current in the 'earth-ground-lead'.

Is the method close enough?

TIA ... 73,

Dave, K3BHJ

1037. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:00:00 UTC
From: Roger <mbjr53@hotmail.com>
Message-ID: <39A50890.9A9CDA79@hotmail.com>
Source record: 181816

Hi,

I have a HF2V still in the box with the TBR160 kit. I have this for sometime now and just wondering how to install it on my rooftop as there are no other place to install it because a lot of houses nearby. I just need an expert advise from you guys who have installed and had been using the Butternut Antenna. Here in the Middle East, most of the houses have flat rooftop. It is used as playground, store area and for drying washed clothes. So I need to install the antenna higher about 10 feet. Now if I install the HF2V using a mast of 10feet, how long are the radials required and does it make any difference if the radials are installed 45 degrees from the feed point down to the roof like guy wires? Please help.

TIA and 73,

Max

Dennis Edey wrote:

> G'day Joe,i have had just abt most of the commerically produced verticle
> antennas that find their way to VK, i had the first GAP TITAN in VK, some
> years back,while it is a good antenna,the Butternut series of antennas i
> find to be a better option,at present i run a HF2V with the TBR160 kit it is
> ground mounted,4 ground plane wires buried,and works very well,have worked
> east Coast USA on 160mtrs,good bang for the buck i feel
> rgds Dennis.
> ps
> have had
> Titan
> DX88
> DX77
> R5
> R7
> reckon the HF6V is tops,HB9CQV has been running a HF6V on hia apartment roof
> for years and i havn't heard him under S7 on PTC2

1038. Potecion for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:00:00 UTC
From: paceral@aol.com
Message-ID: <20000824074427.16211.00001172@ng-ff1.aol.com>
Source record: 181817

Looking at putting up an off center dipole for 10,15,20, and 40 meter as described in the Feb 1996 issue of QST (pg. 65). In my setup it calls for a length of 55ft of 450 ohm ladder line into the shack with connection to the radio through a 1:1 Balun for 15 meter and a 4:1 Balun for 40.20 , 10. Would have to change Baluns for the 2 FREQ ranges. Connection between Balun and radio with short piece of 50 ohm coax
QUESTION How do you provide lighting protection for the ladder line coming into the shack? Doesn't the ladder line have to be grounder before it comes into the shack? Has anyone used this type of antenna? The Carolina Windom 40 uses this type offset dipole but utilizes 10 ft of ladder line with two "special" line isolators.

al KF4OUA

1039. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8o33e9$av5$1@nnrp1.deja.com>
Source record: 181818

Hi Roger,
The B'nut 'tuned' radial kit should work well on a flat roof. Yes you
can put the antenna on a 10 ft mast and then droop the radials to the
roof.
If the radials are flat, not drooped, you will experience a slight miss-
match but it should be tolerable.
Otherwise start with 4 radials ~10% longer than 1/4 wave for your
longest wavelength you wish to operate. If you have troublew with the
shorter xavelengths then you may need 4 per band... (4 for 40 for 80
and 4 for 160) as the roof is flat it should be ez to play around with.
73
Den W2DEN _._

In article <39A50890.9A9CDA79@hotmail.com>,
Roger <mbjr53@hotmail.com> wrote:
> Hi,
>
> I have a HF2V still in the box with the TBR160 kit. I have this for
sometime
> now and just wondering how to install it on my rooftop as there are
no other
> place to install it because a lot of houses nearby. I just need an
expert
> advise from you guys who have installed and had been using the
Butternut
> Antenna. Here in the Middle East, most of the houses have flat
rooftop. It is
> used as playground, store area and for drying washed clothes. So I
need to
> install the antenna higher about 10 feet. Now if I install the HF2V
using a mast
> of 10feet, how long are the radials required and does it make any
difference if
> the radials are installed 45 degrees from the feed point down to the
roof like
> guy wires? Please help.
>
> TIA and 73,
>
> Max
>
> Dennis Edey wrote:
>
> > G'day Joe,i have had just abt most of the commerically produced

verticle
> > antennas that find their way to VK, i had the first GAP TITAN in
VK, some
> > years back,while it is a good antenna,the Butternut series of
antennas i
> > find to be a better option,at present i run a HF2V with the TBR160
kit it is
> > ground mounted,4 ground plane wires buried,and works very well,have
worked
> > east Coast USA on 160mtrs,good bang for the buck i feel
> > rgds Dennis.
> > ps
> > have had
> > Titan
> > DX88
> > DX77
> > R5
> > R7
> > reckon the HF6V is tops,HB9CQV has been running a HF6V on hia
apartment roof
> > for years and i havn't heard him under S7 on PTC2
>
>

--
Den Spiess

Sent via Deja.com http://www.deja.com/
Before you buy.

1040. Re: A yagi w/hi F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:18:16 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39A45CD4.4729309F@GTE.net>
Source record: 181804

Jay Kolinsky wrote:

> Anyone modeling yagis for HF with high signal rejection off the entire rear
> half of the ant? F/R such as 35 db and higher?
>
> JK NE2Q

Although I have seen this when using YO, the bandwidth over which the clean
rear pattern remains is very narrow and usually shows high sensitivity to any
changes in spacing, length etc.

Dale W4OP

1041. Re: 5 Band Unknown Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 00:41:12 UTC
From: Brenda & Bill Beal <bbeal@home.com>
Message-ID: <39A46F53.ED875D18@home.com>
Source record: 181805

FOUND! Was given the idea to look in some old ham magazines. I found it.
It is a CushCraft AV5.

Brenda & Bill Beal wrote:

> Recently I posted a couple of questions thinking I have a Hy-gain
> vertical. An individual advised me to check for part numbers. I have
> really looked over the whole thing and can find no part numbers. I'm
> trying to get a fix on what brand and model it might be. It is 5 band
> (4 trap) antenna about twenty five feet high. There is mix of boots on
> the traps. Some are a thin black plastic while others are a heavy
> rubbery plastic (maybe a replacement). The trap insulators are a
> cream/white plastic, have three interconnected sections, and appear to
> hav a single screw connecting the outer part to the antenna. There was
> a capacitive hat that is now lost. It appears that it was mounted on
> the 20 meter section but that just might be that the clamp was put back
> there by mistake. The base of the antenna is a 2 in diameter piece of
> aluminum tube. The active part of the antenna mounts into it with a
> black plastic or hard rubber section to insulate it. The connector is a
> UHF connector with a black plastic tube protecting the condutor up to
> the contact with the active portion.
>
> I am just getting back into ham radio after about 10 years during which
> this antennas sat around the garage and hung on the fence. I need to
> make/get a new capcitive hat, attach it in the correct position, and
> tune this thing up. Any further help appreciated.
>
> Bill, WD5HHH

1042. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 01:21:10 UTC
From: k6mhe@arrl.net
Message-ID: <39a4785b.12197571@news.mcn.org>
Source record: 181809

A ground rod is a *very* poor RF ground... You may wish to re-think
that.

Danny, K6MHE

On Wed, 23 Aug 2000 23:21:29 GMT, rattlehead@my-deja.com wrote:

>In article <39a10e57.4456592@news.akorn.net>,
> 2w8ji@contesting.com (Tom W8JI) wrote:
>> On Sun, 20 Aug 2000 21:37:39 -0500, 'Doc <w5lz@oio.net> wrote:
>>
>> >
>> >
>> >rattlehead@my-deja.com wrote:
>> >>
>> >-----clipped-----
>> >>
>> >> heh, well, not a convenient one, BUT, any solution that works is a
>good
>> >> one. somebody else mentioned this possibility; could I solve the
>problem
>> >> by just grounding the body of the switchbox itself maybe? I don't
>know
>> >> how I could arrange it such that the unused position is re-directed
>to
>> >> ground, without manually doing so each time; and in this case, I
>might
>> >> as well do as you say, and just unscrew the vertical's coax.
>>
>> If the grounding the cable or the switch is having that much effect on
>> the antenna, I'd fix the real problem. Otherwise, you are likely
>> wasting a bunch of RF that could be going out from a useful place like
>> the antenna.
>>
>> That's why slopers are often called sloppers, because they are sloppy
>> systems.
>>
>> I assume you bring all the feedlines down the tower to ground level,
>> and then go into the house with the cable at ground level? And the
>> tower is grounded for RF?
>>
>> 73 Tom
>>
>
>

>Oh yes, the cables all come down to ground level (but I don't have them
>grounded at that point, that is my next step; to run a ground wire from
>the coax shielded braid to my ground rod near by)... and yes, I have the
>tower grounded for RF and lightning both.

1043. Inquiring Minds

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 01:37:47 UTC
From: Dennis Edey <vk4sx@dingoblue.net.au>
Message-ID: <39a47b99$0$771$7f31c96c@news01.syd.optusnet.com.au>
Source record: 181806

Hello fellas,i was wondering if Cuscraft have sold any R 8 verticles in
USA,??
stuffed if i can find anyone that has used one or even compared one to the
R7000.
iam just looking for a "working mans" comparision..a R 8 has turned up on
Auction site in VK,
is it better than ?? or worse than.the R 7000
Kind Regards
Dennis VK4SX.

1044. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 02:12:04 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Uv%o5.2761$kM2.357211@newshog.newsread.com>
Source record: 181807

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39a40a8d.27404425@news.akorn.net...
> On Wed, 23 Aug 2000 15:26:17 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
>
> >Only seal the one end. Course that doesn't help much when you have
multiple
> >connectors outside.
> >
> >Roger (K8RI)
>
> I only use it on vertical runs Roger, and I poke a hole in the bottom
> of the drip loop so it can drain. I'm slowly replacing it all now.

What do you use for coax tom?
I have to basically replace all mine as the new runs are longer than the
current ones (over all about 175 to 200 feet from rig to antennas).

I'm thinking about using the new Times Wire coax for the VHF and UHF
antennas.

73

Roger (K8RI)
>
> 73 Tom

1045. Re: Bathtub calk, building selant, and other RTVs

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 02:20:24 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ID%o5.2764$kM2.358086@newshog.newsread.com>
Source record: 181808

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39A3645F.98420EAF@eznec.com...
> Roger Halstead wrote:
> > . . .
> > I in 9913 type cables I use the "Dielectric Grease" and fill the
connector.
> > That sutff is good, unfortunately it is both difficult to find and
> > expensive.
> >. . .
>
> The "dielectric grease" I've seen is a silicone grease. I know plumbers
> use silicone grease for lubricating seals -- have you or anyone tried
> getting it at a plumbing shop?
>
There are a number of silicon greases.
The only ones with which I'm familiar, are the DC4 and DC5 Dielectric
Greases made by Dow Corning.
> It's also used for lubricating O-rings, so some industry which would
> have a need to do this should also have a source.
>
Aviation and automotive would be two fields that use it.
I used to use it to water proof ignitions, but keep it away from the actual
HV spark, or you get sand. More properly SIO2

I'd think it would be cheaper at automotive stores than aviation repair
shops.

I used to get mine at the company store and bought a whole carton just
before I retired. (They've since closed the company store) I used to get
the electronic grade RTVs there as well.

> I'm still using a large tube of the stuff I got somewhere surplus about
> 30 years ago. A little goes a long way! But I haven't used it to fill
> connectors.

Actually it doesn't take much to do that either... Unless you have a lot of
connectors.

BTW, I've only used the stuff up through 2 meters so I don't know how it'd
stand up to UHf and beyond.

73

Roger (K8RI)

>
> Roy Lewallen, W7EL

1046. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 02:30:51 UTC
From: njradiodude@aol.com
Message-ID: <20000823223051.02032.00000091@ng-cc1.aol.com>
Source record: 181810

>>> I should note that I don't want to buy a soldering iron (due to the
>
>Then purchase a soldering gun, Jason. It has a spring-loaded finger
>switch -- as soon as you release your finger, the power to the heating
>element is shut off.
>Jeff KH6O
>
>
>
>
>
>

...But it gets soooo hot. You know, those things get hot enough to melt metal. Can't have something that dangerous around the house. He would have to get a lock box, a trigger lock and cut the end off the wire and then just to make absolutely certain that the neighbors kids won't get to it while he's out somewhere and cause yet another tragedy, he'll have to call his power provider to cut his service off...just to be safe, not paranoid.

:)

Tom KB2FIK
NJRadioDude@aol.com

"Just because you're paranoid, it doesn't mean they're NOT out to get you."

1047. Re: Anyone using 25G w/ flat top section?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 02:40:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <fW%o5.2766$kM2.358873@newshog.newsread.com>
Source record: 181811

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:39A46FD6.2EE2D53A@hiwaay.net...
> Dave- I don't have a lot of experience, but I do have the flat-top 25g.

I have the bigger version (flat top 45G)

> My set-up, reading from the rotor plate up, is: rotor, top section of
> tower (between braces) top plate (flat top) bearing, and tri-bander.
> The mast mounts in the rotor, through the bearing, and up to the
> antenna. The Coax comes up through the tower (opinions differ on this),
> out through the top section of braces (outside the top plate) and up to
> the natenna. THe coax is taped to the mast below the antenna to take the
> strain. There is enough slack (loop) in the coax for the mast-antenna
> assembly to move full circle.

I use the guy bracket about a foot below the top of the tower so I use a
cable clamp at the corner hole in the flat top, make one full turn around
the mast (with lots of slack) above the thrust bearing and then tape it down
to the mast as Bill has done.

The tribander goes about one to two feet above the top of the tower, the 6
meter antenna about 15 feet above that and the 2-meter/44 antennas about 12
feet above that and the TV antenna about 8 feet above them. I have to
remember not to use the TV antenna when on 6, or 2 and use a shorting relay
for the preamp at the antenna.

All cables from the top of the tower up have to be flexible.
Actually the TV feed line will go up the *inside* of the mast and the
flexible coil will be around the rotor.

If your antenna is right at the top of the hollow mast there is no real
reason not to go up the inside, but be careful of sharp edges. Remember to
that it might be well to put a metal cap over the top as that is the highest
point of the system.

I'd cut a grove in the side of the pipe at the top, or drill and deburr a
hole *just* below the top for the coax. Then throuroughly seal it in place
using Silistac RTV, or equivelant. Doesn't matter what it smells like in
this case and the stuff that smells like vinegar is stronger than the stuff
for electronics.

This has the advantage that any water trying to get into the cable has to go
up hill right at the start so if there are no horizontal connectors outdoors
I'd only seal them on the outside with the liquid electrical tape, or give

them a good weather proof coating of something, but put nothing inside.

Actually if you don't have any long runs to the antennas it might be easier to run as many as two or three up through the mast instead of going up the outside.

As for inside, or outside the tower, I use what ever is handy at the time.

My old tower has been struck three times in the last 12-15 years and the new tower aparently got one hit yesterday, but with no damage to anything that I've been able to find. Course I don't have much up there yet.
>

> Works for me- Bill- W4BSG
>
Me too.

73,

Roger (K8RI)
> David Edwards wrote:
> >
> > By flat top section, I mean NOT the tapered one.
> > I was wondering what others have done to keep the coax out of the way when
> > the rotor is turning. In the past, I just made a loop around the rotor. But,
> > that was with mast mounted rotors. Now I have the tower, and it is more of
> > an obstacle for the coax to rotate around.
> > Thanks for the read....
> > PS...If you have had lots of 25G experiance, I would also be interested in
> > chatting. I just put mine up, but still slapping up antennas.
> > Regards....Dave

1048. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 04:09:46 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ee1p5.3694$x16.266234@monger.newsread.com>
Source record: 181812

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:39a4785b.12197571@news.mcn.org...
> A ground rod is a *very* poor RF ground... You may wish to re-think
> that.
Even in relativly good soil, the RF ceases to know that the ground rod is
there for much more than a foot.

Many years ago, not too long after getting my license, I had my station set
up in the basement. The details are a *bit* foggy as that was nearly 40
years ago, but near as I recall:

I was using the copper pipe in the heating system as a ground and it seemed
to be working quite well.

I was closing down and as there were supposed to be some storms that night.
I grounded the coax center connector from a jumper to the rig to a handy
point on the copper pipe as well. The signals on 20 didn't get any weaker.

So...I thought ...why not and keyed up the old HT37 and called a station
that had been calling CQ. He came right back.

As I recall the distance was around 600 - 800 miles so it was rather short
hop, but signals were strong..

We lived on a shallow sandy hill that was maybe 8 feet above the average of
the flat land around us and with the basement walls the heating pipes were
probably a little over 2 feet above the surface. So I had an antenna about
10 feet above the average surface level.

It had to be pure luck that I hit the proper connection point, but it did
work. Using the "facalities" while transmitting would probably not have
been a real good idea. <:-))

Roger (K8RI)

>
> Danny, K6MHE
>
> On Wed, 23 Aug 2000 23:21:29 GMT, rattlehead@my-deja.com wrote:
>
> >In article <39a10e57.4456592@news.akorn.net>,
> > 2w8ji@contesting.com (Tom W8JI) wrote:
> >> On Sun, 20 Aug 2000 21:37:39 -0500, 'Doc <w5lz@oio.net> wrote:

> >>
> >> >
> >> >
> >> >rattlehead@my-deja.com wrote:
> >> >>
> >> >-----clipped-----
> >> >>
> >> >> heh, well, not a convenient one, BUT, any solution that works is a
> >good
> >> >> one. somebody else mentioned this possibility; could I solve the
> >problem
> >> >> by just grounding the body of the switchbox itself maybe? I don't
> >know
> >> >> how I could arrange it such that the unused position is re-directed
> >to
> >> >> ground, without manually doing so each time; and in this case, I
> >might
> >> >> as well do as you say, and just unscrew the vertical's coax.
> >>
> >> If the grounding the cable or the switch is having that much effect on
> >> the antenna, I'd fix the real problem. Otherwise, you are likely
> >> wasting a bunch of RF that could be going out from a useful place like
> >> the antenna.
> >>
> >> That's why slopers are often called sloppers, because they are sloppy
> >> systems.
> >>
> >> I assume you bring all the feedlines down the tower to ground level,
> >> and then go into the house with the cable at ground level? And the
> >> tower is grounded for RF?
> >>
> >> 73 Tom
> >>
> >
> >
> >Oh yes, the cables all come down to ground level (but I don't have them
> >grounded at that point, that is my next step; to run a ground wire from
> >the coax shielded braid to my ground rod near by)... and yes, I have the
> >tower grounded for RF and lightning both.
>

1049. Thanks!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 04:21:59 UTC
From: Bruce Winkelman <bdwink@home.com>
Message-ID: <Hp1p5.88910$oj6.1711306@news1.rdc1.tx.home.com>
Source record: 181813

A big thank you to all that responded to my questions about vertical antennas, both on the newsgroup and direct email. Great suggestions and comments! Very much appreciated.
Bruce Winkelman AA5CO Tulsa, OK

1050. Re: Slinky Antenna construction question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-24 05:28:16 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8o2bpg$71k$4@bashir.peak.org>
Source record: 181814

TyllEulenspiegel <tylleulenspiegel@aol.com> wrote:

: ignored? everything has inductance

Even a resonant antenna?

--
Bill Nelson (billn@peak.org)

1051. Re: WT Bird 10-W HF Slug

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a80579.27549976@news.akorn.net>
Source record: 181719

On 26 Aug 2000 14:24:41 GMT, k1bqt@aol.com (K1BQT) wrote:

>Cheap? I got zillions tied up in that overgrown processor-driven push-button
>littered digital-readout gizmo. Now I'm doomed for life to be slug-poor, and
>you're calling me cheap (stupid perhaps)?

Buy some slugs, or dig some up somewhere. That Bird is hard to beat.

>Thanks for your help. Come to think of it, you work for a big company. Any
>spare 10Hs in the stockroom?

Maybe Peter will loan you his Bird or some slugs.

Other than that, why don't you check HRO in Dollieville? There might
be some spare slugs there.

73 Tom

1052. FA MFJ-259B CARRYING CASE MFJ-66 DIP METER COILS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: chris fox <cfox007@bellsouth.net>
Message-ID: <39A80A3F.325460FC@bellsouth.net>
Source record: 181720
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.antenna

Please take a look at all my auctions thank you.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=418976092

1053. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <R3Up5.31820$p5.899993@nntp1.onemain.com>
Source record: 181721
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Would a pager then be supposedly more worrisome healthwise
> than a walkman when close to the body all day

Jesus let's really sweat the small stuff!!!! Give me a break! Do you worry
about the sky falling too?

1054. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Patricia Gibbons <wa6ube@tactical-link.com>
Message-ID: <8o92nd$ge7$1@nntp9.atl.mindspring.net>
Source record: 181722

Take a look at the "NVIS" area of my
website for some ideas .. :

contrary to popular opinion, antennas close
to the ground DO work:

http://www.tactical-link.com

Trish
--
Patricia E. Gibbons & Carla Satra
Tactical Link Systems
<ICQ#: 72818195>
<http://www.tactical-link.com>
see my comvan at:
<http://www.qrz.com/callsign.html?callsign=wa6ube>
.....
My Public Key is available at:
<http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

Jim Hahn <jimboL51@home.com> wrote in message
news:39971782.170D7DB@home.com...
> Please help! I live in an area in San Diego where we have extremely
> restrictive CC&R's. Am getting back into amateur radio after an absence
> of some 32 years with a DX-60, HR-10, and a HW-8 QRP transceiver. Am
> primarily interested in cw on 40 or 30 meters. I cannot place an
> antenna really higher than our fence outside our house which is about
> 8-10 in height. Will not be running greater than 90 watts which is the
> most that the DX-60 will put out. Suggestions for an antenna for this
> setup? I would love to just put up a dipole but will not be possible
> because of neighbors. Also would love to put up the RG-8 by Cushcraft
> but would have the same problem at 26'. Have looked at: MFJ loop
> (expensive!), spider antenna advertised in QST, and the Isotron Bilal
> but have been told unless you have the bilal up high it would be a waste
> of time. Thanks for any input anyone can give me! Jim in San Diego
>
>
>
>

1055. Re: PCR-100

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Patricia Gibbons <wa6ube@tactical-link.com>
Message-ID: <8o932tnqd1@slb2.atl.mindspring.net>
Source record: 181723
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

save up some additional cash and
get the PCR-1000 ..

eventually you will want to be
able to copy SSB on HF, and you
won't be able to with the PCR-100

HRO is now selling the PCR-1000 for
about $349.0

great performance for the money, and
it has lots of selectable filter choices..

Trish
--
Patricia E. Gibbons & Carla Satra
Tactical Link Systems
<ICQ#: 72818195>
<http://www.tactical-link.com>
see my comvan at:
<http://www.qrz.com/callsign.html?callsign=wa6ube>
....
My Public Key is available at:
<http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

Peter <ve9ptr@hotmail.com> wrote in message
news:I9jm5.3329$bW2.26661@sodalite.nbnet.nb.ca...
> I'm looking for any thoughts or comments on this PC controlled radio from
> ICOM....
>
> Pete
>
>

1056. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A819DD.F8DDA048@eznec.com>
Source record: 181724
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

I don't think the general population has any concept of the nature of radio frequency energy, let alone the distinction between the power levels involved in transmitting and receiving. Given that lack of background knowledge, I suppose it's a reasonable concern. At least, not a surprising one.

To the concerned person: The power being radiated by your pager is somewhere around a millionth to a billionth the amount of power radiated from a transmitting cellular phone. In any urban area (and most rural ones in the U.S. at least), your body is constantly being struck by radio waves which are many times stronger than the signal from your pager. The difference your pager makes in the total background of energy striking your body is miniscule.

Roy Lewallen, W7EL

"John P. Franklin" wrote:
>
> Would a pager then be supposedly more worrisome healthwise
> > than a walkman when close to the body all day
>
> Jesus let's really sweat the small stuff!!!! Give me a break! Do you worry
> about the sky falling too?

1057. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A81BCD.3DE4A3E3@eznec.com>
Source record: 181725

I have a problem with declaring an antenna to "work". This nicely separates all antennas into binary pigeonholes, ones that "work" and ones that don't. It leaves no room for the vast continuum of performance parameters that distinguish the many types of antennas. Using this simplified sorting method, we no longer have to concern ourselves with the mundane details of pattern, gain, directivity, or other distractions.

If the object is radiating a signal which can be heard by someone, somewhere, bed springs "work". Buried antennas "work". Light bulbs "work". Most dummy loads "work". In fact, you have to work really hard to make an "antenna" that doesn't "work".

Indeed, antennas low to the ground not only "work", but are among the very best for NVIS communication. In contrast, higher antennas work much better for long range communication, and much worse for NVIS.

Roy Lewallen, W7EL

Patricia Gibbons wrote:
>
> Take a look at the "NVIS" area of my
> website for some ideas .. :
>
> contrary to popular opinion, antennas close
> to the ground DO work:
>
> http://www.tactical-link.com
>
> Trish

1058. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Floyd Davidson <floyd@ptialaska.net>
Message-ID: <87bsyfq0tc.fld@barrow.com>
Source record: 181726
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

"Dan Jacobson" <jidanni@kimo.FiXcomTHiS.tw> wrote:
>Hello, I have a Motorola FLEX pager, that I clip on my belt.
>When my walkman listening to an AM station gets close to it, I
>hear a OoooOoooOoooOooo sound, indication that it is somehow
>putting out radio signals. I thought pagers, like walkmans,
>just received signals, not emitting... Would a pager then be
>supposedly more worrisome healthwise than a walkman when close
>to the body all day? But if I were to put it in my backpack to
>be away from the body, I could not be alerted in noisy
>environments or at meetings, both of which I use the vibration
>alert selection for.

Any device that has digital circuits will generate a lot of
radio frequency signals. The pulses involved in digital signals
are guaranteed to be full of such RF (each squarewave pulse
consists of the frequency of that pulse, plus every odd harmonic
of it at gradually decreasing amplitudes). Typically that
results in noise that can be heard on an AM radio. You will
find the same kind of noise if you put a radio up close to a
computer, for example.

I doubt that the energy levels coming from either a walkman or a
pager are a health threat. Or at least not from the radio
frequency energy they emit (the walkman also emits some RF,
BTW). Either device might be a danger if you start paying any
attention to the *sound* energy that can come from them though!

I'd recommend ignoring them both entirely, which is usually best
accomplished by leaving them in a desk drawer somewhere...

--
Floyd L. Davidson floyd@barrow.com
Ukpeagvik (Barrow, Alaska)

1059. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a82a29.36943860@news.akorn.net>
Source record: 181727

On Sat, 26 Aug 2000 11:36:10 -0700, "Patricia Gibbons"
<wa6ube@tactical-link.com> wrote:

>contrary to popular opinion, antennas close
>to the ground DO work:

Sure, in one test you report a difference of "ten over nine" on a six foot high antenna on 40 meters and S8 for an antenna several inches above ground.

None of us know how accurate that test, or any of the tests are, but that certainly could be true. That might be an actual ten dB difference or a 20 dB difference, either way it's a big difference!

However, even the stronger six-foot-high antenna would benefit several dB from a good ground screen and more height yet...even for NVIS.

There's no question almost anything will radiate and allow contacts to be made, the question is always "is it as good as I can reasonably do?"

73 Tom

1060. UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: "Robert BIOWSKI, M.D." <robert.biowski@univie.ac.at>
Message-ID: <39A8AED5.C28438B5@univie.ac.at>
Source record: 181728

In einer Entfernung von ca. 50 km Luftlinie strahlt ein ï¿½uï¿½erst hï¿½renwerter Radiosender
(Funradio) in vertikaler Polarisation ab. Im Auto kann ich diesen mehr oder weniger recht
gut empfangen, bei meiner Heimanlage ist dies nicht so leicht zu realisieren.
Dzt. habe ich eine 7-Element UKW Antenne der Fa.Wittenberg in horizontaler Lage dorthin
ausgerichtet. Das Ergebnis ist nicht wirklich befriedigend (Funradio 40 dB, die lokalen Sender
kommen weiter mit 78 dB), d.h. im Stereo-Betrieb ist da noch immer ein leichtes Rauschen.
Der nï¿½chste Schritt wï¿½re jetzt eine 90 Grad Drehung der Antenne, was in Anbetracht der
gegebenen Verhï¿½ltnisse recht aufwendig aber machbar wï¿½re.
Hat jmd. Erfahrung und kann sagen, ob das etwas bringen kï¿½nnte oder ist das bei UKW mit
der Polarisation nicht so heikel?
Robert

1061. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000826171617.26165.00000025@ng-cd1.aol.com>
Source record: 181729

>Suggestions for solutions don't enter into the argument. It
>was already sorted out 70 years ago. Computer-aided analysis
>and prediction merely bypass the hard labour which used to
>be involved in using abacus, paper and pencil, slide rules
>and log-tables.
>

You do not understand the method of moments, based on this statement.

Inverting matrices is extremely time consuming with the tools you mention==when applicable at all..

NC

1062. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000826172852.15228.00000100@ng-mf1.aol.com>
Source record: 181730

>Subject: why do pagers emit radio frequencies?
>From: "Dan Jacobson" jidanni@kimo.FiXcomTHiS.tw
>Date: Sat, Aug 26, 2000 8:46 AM
>Message-id: <8o8s3f$rkm@netnews.hinet.net>
>
>Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
>walkman listening to an AM station gets close to it, I hear a
>OoooOoooOoooOooo sound, indication that it is somehow putting out radio
>signals. I thought pagers, like walkmans, just received signals, not
>emitting...

Most receivers also transmit.

Ever use a scanner for a signal source ?
It can give a full scale reading on your HT over
a half block away.
Works good for testing antennas.

73 Al Lowe N0IMW
Arrow Antenna

1063. Re: Dipole scenerio/problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: sktullgren@aol.com
Message-ID: <20000826173820.21587.00001244@ng-da1.aol.com>
Source record: 181731

thank you again for the advise. I have already shipped the other power supply back and have traded it for a large one.

This newsgroup has been real helpful thank you.
73
shawnkd5hlm

1064. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000826175430.24496.00001007@ng-cu1.aol.com>
Source record: 181732

>It's no lie and you God Damn well know it!!!
>So sue me HA HA !!!!
>So...you ARE the fractal freak!!
>Funny how you were quick to
>respond to your name.
>AOL has been notified of
>your bullshit. Happy camping...
>better look for another ISP...
>

Chuck--

Please tell everyone how your this pursuit against the allegedly bogus post gone under the 'w8ji@aol.com' screenname is going.

I have a minor curiosity in who is the forger.

It is obviously not me.

Not a peep out of AOL, which is logical considering I have nothing to do with it. And I am still here. Can't imagine why I shouldn't or wouldn't be....

I hope these bogus accusations--and I believe this is the 5th or sixth in two weeks, will stop. It is annoying and injurious to my reputation.

Chuck O'Neal has stated that he has notified AOL about these alleged forgeries, and I think that is a great move. What he has NOT told you is that if he has received ANY response at all, it certainly does NOT invoke me.

Best Regards,

Chip N1IR

1065. Re: You Know You're an Antenna Guru When....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000826175519.24496.00001008@ng-cu1.aol.com>
Source record: 181733

Say Chuck--

Would you like to meet for lunch tomorrow at Boxboro?

Best,
Chip N1IR

1066. Re: Question on modifying a dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A83BDB.5EBF420B@oio.net>
Source record: 181734

Randy Mclean wrote:
>
> I currently have a Van Gorden All Bander dipole that uses a 450 ohm
> ladder line for the antenna feed. Well what has got me worried is that
> our area is extremely prone to lightning. What I am thinking about doing
> in removing the current ladder line and replace it with a Hi-Q Center
> Insulator that has a pl259 output so I can then use a lightning arrestor
> inline with the coax. Is my ideas a sound one?? Do I need a Hi-Q Balun
> rather than a Hi-Q Center Insulator? Will I lose performance with this
> setup? Dose anyone know of a good lighting protection for a ladder line
> feed? Thanks

Randy,
Spark gap lightning arrestors are totally worthless. For a
lightning arrestor to be effectove it has to be very fast acting.
'Spark gap' arrestors are about as slow as one can be, don't
bother.
The simplest/easiest means of protecting your self is to just
disconnect the antenna. A couple of 'aligator' clips, or a knife-
switch work well, and you won't 'screw up' your antenna.
'Doc

1067. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A83C53.CF87F4B2@oio.net>
Source record: 181735
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Dan,
All receivers have an oscilator (including TV's). Your
hearing the oscilator.
'Doc

1068. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39A83356.B024B355@berkshire.net>
Source record: 181736
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

your walkman undoubtedly radiates some rf also. unless extremely well shielded almost all electronic devices (even receivers) radiate something. most devices have to pass an fcc certification to make sure they don't radiate enough to interfer with other devices, but at very close range you will still be able to detect it.

Dan Jacobson wrote:
>
> Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
> walkman listening to an AM station gets close to it, I hear a
> OoooOoooOoooOooo sound, indication that it is somehow putting out radio
> signals. I thought pagers, like walkmans, just received signals, not
> emitting... Would a pager then be supposedly more worrisome healthwise
> than a walkman when close to the body all day? But if I were to put it in
> my backpack to be away from the body, I could not be alerted in noisy
> environments or at meetings, both of which I use the vibration alert
> selection for.
> --
> www.geocities.com/jidanni ... fix e-mail address to reply; ï¿½nï¿½ï¿½ï¿½ï¿½
> Tel:+886-4-5854780; starting in year 2001: +886-4-25854780

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

1069. Re: Question on modifying a dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Randy Mclean <k5drm@noaddress.com>
Message-ID: <39A84EAC.1C158412@noaddress.com>
Source record: 181737

'Doc wrote:

> Randy Mclean wrote:
> >
> > I currently have a Van Gorden All Bander dipole that uses a 450 ohm
> > ladder line for the antenna feed. Well what has got me worried is that
> > our area is extremely prone to lightning. What I am thinking about doing
> > in removing the current ladder line and replace it with a Hi-Q Center
> > Insulator that has a pl259 output so I can then use a lightning arrestor
> > inline with the coax. Is my ideas a sound one?? Do I need a Hi-Q Balun
> > rather than a Hi-Q Center Insulator? Will I lose performance with this
> > setup? Dose anyone know of a good lighting protection for a ladder line
> > feed? Thanks
>
> Randy,
> Spark gap lightning arrestors are totally worthless.

Hmm, is their a type of attestor that you would recommend. I was looking at the Cushcraft LAC-4. We used an arrestoer(not sure the brand) on our club repeater and about two years ago it look a direct strike. The antenna was turned into tooth picks, but all the gear below the arrestor was untouched. My be we just had good luck. Do you classify all arrestors the same way??

Thanks for the reply.

1070. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: sideband@cac.net
Message-ID: <39a8577e.179917872@news.cac.net>
Source record: 181738

Rick:

No offense was really taken... I had just hoped to clear up that issue
(nip it in the bud, as it were) before it got out of hand. I am aware
of the "alternate personalities" which seem to abound on this NG due
to one or more individuals trying to cause hate and discontent. I am
not one of them.

I have gotten much good information from this newsgroup, indeed even
from you (If you'll recall the "Homebrew Dipole" thread, also
initiated by myself) and am thankful for the pointers and help I have
gotten.

73's to you and yours.

-SSB

On or about 26 Aug 2000 17:51:10 GMT, k1bqt@aol.com (K1BQT), using the
forum rec.radio.amateur.antenna did say:

:Hi SSB--
:
:>I assure you I am no troll. I am unrelated to "freaktenna"<
:
:That being the case, I believe I owe you an apology. There are alot of aliases
:floating around the NG right now, and I think I somehow mixed you up with one
:of them. It was my mistake, and I regret the error.
:
:Hope you find some useful answers on here, and I'll take a closer look at your
:posts to see if there's anything I can contribute (if not, I'll stay out of the
:way). Certainly my previous post was not constructive. With apologies--
:
:Rick K1BQT
:

1071. Re: Question on modifying a dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a85789.48560700@news.akorn.net>
Source record: 181739

On Sat, 26 Aug 2000 16:51:23 -0500, 'Doc <w5lz@oio.net> wrote:

> Spark gap lightning arrestors are totally worthless. For a
>lightning arrestor to be effectove it has to be very fast acting.
>'Spark gap' arrestors are about as slow as one can be, don't
>bother.

Spark gap arrestors aren't slow. They are just as fast as any other scheme, maybe faster than some methods.

> The simplest/easiest means of protecting your self is to just
>disconnect the antenna. A couple of 'aligator' clips, or a knife-
>switch work well, and you won't 'screw up' your antenna.

Yep, disconnect the antenna. You won't be operating anyway during a storm.

73 Tom

1072. Re: Clarification of my question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8o9sh7$6es$1@slb2.atl.mindspring.net>
Source record: 181740

Wayne:

20 feet is about 7 meters or 1/3 wavelength at 20 meters, which is quite a bit removed from "ground".

Always keep in mind that distance along a conductor/transmission line as measured in wavelength is a non-negligible factor when dealing with RF frequencies.

And so... even if you had a "perfect" ground 20 feet away, when your transmitter looks at it through 20 feet of wire it is appears to be an entirely different impedance/object from the "perfect" ground 20 feet away on the other end of the ground wire.

From the transmitter viewpoint it is sort of like you trying to read perfect number 10 font type text through the bottom of a coke bottle. You know it's perfect but it doesn't look like that to you.

That being said, your "perfect" ground 20 feet away on the ground wire is likely not very perfect either and so...

A better analogy would be you trying to read the scriblling of a 4 year old's hand printing throught the bottom of a coke bottle.

And so... your, 20feet of wire connected to a ground rod, grounding scheme will do something at RF, who knows what? And... may result in acceptable ham station performance in terms of snagging some QSO's but... it probably won't be even a close approximation to a good RF ground!

Wayne, it would be difficult to provide a complete education on RF transmission line physics and RF system grounding here on newsgroup postings, and so... you need to get some study materials and do some experimenting and keep asking questions on the NG to get a good understanding of this area of the radio arts.

If you are "in a hurry" I would suggest finding a local "expert" ham to help you. If you have time to "mess around", then get some good books, some test equipment, ask questions on the NG and keep experimenting, after a while, you too will be an expert on RF grounds.

Best,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--

Wayne Grauel <wgvideo@attglobal.net> wrote in message
news:399FCEF6.66815706@attglobal.net...
>
> I'm not talking about a ground plane here for the antenna, I'm addressing
> that ground lug on the back of the radio and the tuner. Plan on using #12
> stranded, insulated, copper wire. I was going to send this out (about 20
> feet) to a common ground rod that also serves as the AC ground for the
house
> electrical system.
>
> Sorry if i wasn't clear.
>
> Wayne
>

1073. Re: UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A89054.A2E8F3B9@oio.net>
Source record: 181741

"Robert BIOWSKI, M.D." wrote:
>
> In einer Entfernung von ca. 50 km Luftlinie strahlt ein ï¿½uï¿½erst
> hï¿½renwerter Radiosender
> (Funradio) in vertikaler Polarisation ab. Im Auto kann ich diesen mehr
> oder weniger recht
> gut empfangen, bei meiner Heimanlage ist dies nicht so leicht zu
> realisieren.
> Dzt. habe ich eine 7-Element UKW Antenne der Fa.Wittenberg in
> horizontaler Lage dorthin
> ausgerichtet. Das Ergebnis ist nicht wirklich befriedigend (Funradio 40
> dB, die lokalen Sender
> kommen weiter mit 78 dB), d.h. im Stereo-Betrieb ist da noch immer ein
> leichtes Rauschen.
> Der nï¿½chste Schritt wï¿½re jetzt eine 90 Grad Drehung der Antenne, was in
> Anbetracht der
> gegebenen Verhï¿½ltnisse recht aufwendig aber machbar wï¿½re.
> Hat jmd. Erfahrung und kann sagen, ob das etwas bringen kï¿½nnte oder ist
> das bei UKW mit
> der Polarisation nicht so heikel?
> Robert

Robert,
If I understand you correctly, you are wondering if changing
polarization will improve the received signal. There is about
a 30db difference in receive strength between vertical and horizontal
polarization. If the transmitted signal is vertically polarized, best
signal will be from a vertically polarized antenna.
'Doc

1074. Re: Question on modifying a dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A89165.73AFC534@oio.net>
Source record: 181742

Randy Mclean wrote:
>
---clipped----
> Hmm, is their a type of attestor that you would recommend. I was looking at
> the Cushcraft LAC-4. We used an arrestoer(not sure the brand) on our club
> repeater and about two years ago it look a direct strike. The antenna was
> turned into tooth picks, but all the gear below the arrestor was untouched. My
> be we just had good luck. Do you classify all arrestors the same way??
>
> Thanks for the reply.

I can't think of the manufacturor, but the arrestors that are
most effective use a 'gas discharge' cartridge. Once they 'blow',
the cartridge needs to be replaced. There are several manufacturors
who make them, I'm just drawing a 'blank'...
'Doc

1075. Re: UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39A89708.77E410E6@saber.net>
Source record: 181743

LieberRobert, OM, wir wissen hier nicht welcher Polarization Sender Fa. Wittenberg hat. Aber wann Sie kreuz-polariziert sind, seiner signal ca. 20 oder 30 dB geschwachert ist.

Schoenes Glueck!

Cortland
(ka5s@saber.net)
ex DL4AE, DA1IQ DA1GI

"Robert BIOWSKI, M.D." wrote:

> In einer Entfernung von ca. 50 km Luftlinie strahlt ein ï¿½uï¿½erst
> hï¿½renwerter Radiosender
> (Funradio) in vertikaler Polarisation ab. Im Auto kann ich diesen mehr
> oder weniger recht
> gut empfangen, bei meiner Heimanlage ist dies nicht so leicht zu
> realisieren.
> Dzt. habe ich eine 7-Element UKW Antenne der Fa.Wittenberg in
> horizontaler Lage dorthin
> ausgerichtet. Das Ergebnis ist nicht wirklich befriedigend (Funradio 40
> dB, die lokalen Sender
> kommen weiter mit 78 dB), d.h. im Stereo-Betrieb ist da noch immer ein
> leichtes Rauschen.
> Der nï¿½chste Schritt wï¿½re jetzt eine 90 Grad Drehung der Antenne, was in
> Anbetracht der
> gegebenen Verhï¿½ltnisse recht aufwendig aber machbar wï¿½re.
> Hat jmd. Erfahrung und kann sagen, ob das etwas bringen kï¿½nnte oder ist
> das bei UKW mit
> der Polarisation nicht so heikel?
> Robert

1076. Re: extending range of 900mhz ss cordless phone

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-26 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39A897CC.ED86500E@saber.net>
Source record: 181744
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

The 900 Mhz phone is alerady operating in the same range where we have privileges.

Cortland
ka5s@saber.net

Dan Finn wrote:

> However, he modify it if he retunes to a ham frequency, probably near
> 900MHz.

1077. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bill, KC8MVW <tracker8565@my-deja.com>
Message-ID: <8obe3f$i5q$1@nnrp1.deja.com>
Source record: 181669

To clarfiy, I cannot get the antenna outside due to restrictions of the
university that I attend. My antenna must be indoors and a local ham
told me that if I have a twin lead j-pole in cpvc or pvc that it would
work better then how it is now. He also stated that it had to be built
in a certain way. I havn't been able to find the site and was hoping
that some wone knew where it was or had the plans already. Thanks.
BB

In article <2SapOX+J8Swu2SCQZXwofM3RvsRt@4ax.com>,
Bob Miller <bamiller@texas.net> wrote:
> Bill, KC8MVW <tracker8565@my-deja.com> wrote:
>
> >Hello to the group,
> > I have built and tuned one of the above antennas, but for some
reason
> >it doesn't perform the way it should. I was told that the building
that
> >I now reside in was built with a grounded steel mesh under the
> >plaster. I have no way of getting the antenna outdoors and in
> >the "clear." A local ham informed me that there are plans for an
> >indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and
> >should work in my room without a problem.
>
> Why would a j-pole transmit through your steel mesh walls when your
> current antenna won't? Are you planning to stick the j-pole out the
> window?
>
> Maybe I'm misinterpreting your words above, but it sounds like you
> want to use the j-pole indoors.
>
> Bob
> k5qwg
>
> > Would anyone know where I
> >can find that site, or have the plans available? Thanks for all the
> >help in advance.
> >-73's-
> >BB
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1078. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Lizard Blizzard <nospam@postoffice.pacbell.net>
Message-ID: <39A938F6.5A01A810@postoffice.pacbell.net>
Source record: 181670
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Mark Fergerson wrote:
[snip]

> Do you have a watch with an EL backlight (Indiglo, etc.)? Hit the
> backlight button and put the watch next to your Walkman. Kewl.

I tried it with my Casio watch and I get a loud tone. I also tried it using my tone tracer and got pretty much the same thing. I read somewhere that there's a high voltage upconverter in there, but it must be small and light since it's not obvious from the outside that there's any transformer or whatever in there.

One thing is for certain: Indiglo lights wear down the battery fast. I don't use it, and I don't want it to go off at any time. I tried to turn it off in one of the menues, but it still activates when I press the light button. I hate that, because I see it go off occasionally when I bump my wrist into something. Dammit, I wish it could be disabled completely.

> Mark L. Fergerson

1079. Re: UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: "Robert BIOWSKI, M.D." <robert.biowski@univie.ac.at>
Message-ID: <39A9C440.788A8109@univie.ac.at>
Source record: 181671

First, thank you for your replies.

I didnot write the original message in English because these technical terms are very difficult for a native German speaker.

That radio station is FUNRADIO (www.funradio.sk) and the antenna is made by WITTENBERG.

Now I have another question. What do you think will happen with the local radio

signals when I turn the antenna 90 degrees? Now I can receive them with 72 to 78 dB, a minus of 30 dB would be too much.

Robert

1080. Re: FA RADIO GEAR LAST HOURS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39A945AE.BFCC07BF@hiwaay.net>
Source record: 181672
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Chris- a few comments re your post, and your listing on ebay.

Why do you add all the 'Mickey Mouse' java and background to your listing?- It only adds to the download time and adds NOTHING to the content of the listing.
After all- you already have someones attention, or they wouldn't see it in the first place. such tricks only turn me off from looking at anything else you have there. THe download time on your listings was significantly more than for most simple- straight-forward items.

just my opinion- Bill-W4BSG

chris fox wrote:
>
> Hi please take a look at all my auctions last hours .
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=418922417

1081. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39A9445F.5EFEFF16@home.com>
Source record: 181673
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Lizard Blizzard wrote:
>
> Mark Fergerson wrote:
> [snip]
>
> > Do you have a watch with an EL backlight (Indiglo, etc.)? Hit the
> > backlight button and put the watch next to your Walkman. Kewl.
>
> I tried it with my Casio watch and I get a loud tone. I also tried it
> using my tone tracer and got pretty much the same thing. I read
> somewhere that there's a high voltage upconverter in there, but it must
> be small and light since it's not obvious from the outside that there's
> any transformer or whatever in there.

You must not take watches apart much ;>) There's just a single SM
transistor driving an inductive kick circuit. A SM cap on the base
sets the "on" time. The tone slowly changes on mine as the cap
discharges. Lots of room on those tiny boards, considering.

They make nice backlights for small meters when you have a decent
power supply available. But shield it, or else. Very noisy.

> One thing is for certain: Indiglo lights wear down the battery fast. I
> don't use it, and I don't want it to go off at any time. I tried to
> turn it off in one of the menues, but it still activates when I press
> the light button. I hate that, because I see it go off occasionally
> when I bump my wrist into something. Dammit, I wish it could be
> disabled completely.

You got that right. Just open the case and carefully remove the tiny
bit of metal that completes the circuit when you push the button. Then
superglue the button in place in the case. Wait for it to set
completely before reassembly.

Alternatively, shave/grind the button down so it won't activate
accidentally.

Mark L. Fergerson

1082. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39A94B27.4B80@wt.net>
Source record: 181674

Bill, KC8MVW wrote:
>
> Hello to the group,
> I have built and tuned one of the above antennas, but for some reason
> it doesn't perform the way it should. I was told that the building that
> I now reside in was built with a grounded steel mesh under the
> plaster. I have no way of getting the antenna outdoors and in
> the "clear." A local ham informed me that there are plans for an
> indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and
> should work in my room without a problem. Would anyone know where I
> can find that site, or have the plans available? Thanks for all the
> help in advance.
> -73's-
> BB

If you were in steel mesh, I doubt the vertical would "actually" work much better than the other one as far as total rf escaping the room, but it would appear to in practice because most FM repeaters,simplex etc is vertically polorized as a rule. This can mean 20 db or so difference. So it would work better than the present one, but still would be a whole lot better outside same as the other one. A twin lead dipole even outside is not the greatest FM antenna. What I do here is just hang a 1/4 wave ground plane from the ceiling. Easy to make in minutes with 5 pieces of 19 inch stiff wire or rod and a so-239 coax connector. Fed with a short amount of coax.To hang it up I tie fishing line to the tip of the radiator and hang from the ceiling with a thumbtack or nail. With whatever you use, walk around the room trying different places before you pick the final spot. You will likely find places much better than others. In a normal wood house with not too much metal around, an indoor antenna can work real well. MK

--
http://web.wt.net/~nm5k

1083. YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Cory Papenfuss <papenfus@juneau.ece.uiuc.edu>
Message-ID: <OXbq5.2314$9N1.39397@vixen.cso.uiuc.edu>
Source record: 181675

I was just wondering if the large base-loading coil flavor of the
10-11M antenna (with the 4-10" diameter 5-10 coil free-air loading coil)
is better than the continuously-loaded 5/8 wave fiberglass type.

Thanks,
-Cory

--

1084. FA RADIO GEAR/ACCESS.LAST HOURS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: chris fox <cfox007@bellsouth.net>
Message-ID: <39A94E0D.B7FEC77C@bellsouth.net>
Source record: 181676
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Please check out all my auction they are going off soon.thanks

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=418976092

1085. You Might Be a Redneck if.....Was: You Know You Are----------

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A95540.2229@bellsouth.net>
Source record: 181677

And you might be a Redneck if.....

Your mobile has more antennas in the air than wheels on the ground! LOL!

1086. Re: You Might Be a Redneck if.....Was: You Know You Are----------

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Guyton <warsaw@bayou.com>
Message-ID: <39A95EED.1EAA@bayou.com>
Source record: 181678

Jerry Oxendine wrote:
>
> And you might be a Redneck if.....
>
> Your mobile has more antennas in the air than wheels on the ground! LOL!

I resemble that remark!!!!

1087. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39A96B8C.F60382F5@oio.net>
Source record: 181679

Bill,
With metal mesh in the walls of your dorm, your in effect operating inside of a Faradaqy cage. Reception will not be the 'best' in the world no matter what antenna you use. One suggestion would be to hang an antenna in the window. One way of doing this on VHF is to use 'burglar alarm' tape for the antenna elements. A couple of the connectors used with this tape make handy connection points for the feed line, and if/when you move, simply peel off the tape.
'Doc
PS - Wouldn't run more than 400-500 watts through it though...

1088. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Lizard Blizzard <nospam@postoffice.pacbell.net>
Message-ID: <39A9714D.A007744A@postoffice.pacbell.net>
Source record: 181680
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Mark Fergerson wrote:

> > [snip]

> > when I bump my wrist into something. Dammit, I wish it could be
> > disabled completely.

> You got that right. Just open the case and carefully remove the tiny
> bit of metal that completes the circuit when you push the button. Then
> superglue the button in place in the case. Wait for it to set
> completely before reassembly.

> Alternatively, shave/grind the button down so it won't activate
> accidentally.

I thought about grinding the button down. But I tried to 'modify' the rubber button on my remote control and I had one helluva time. I used a sharp drill without success and tried a knife, and it didn't do anywhere near as much damage as I wanted. I dunno what they use to make those buttons, but they're hard to work with, not so much tough as they are flexible and tend to give instead of be cut up. All I was trying to do was put a dimple in the middle of the button so I could recognize it by feel instead of having to turn the light on. Jeez, you'd think they would think of such things! Also if I go a little too deep, the whole button top might come off, exposing the innards and ruining the water seal. I may just fill it up with superglue.

BTW, I've got a couple casios that I've 'worn out', mostly the keypad has fallen off and beat up on the outside. But they still work, and I put new batteries in one and I hung it next to my kenwood HF receiver to keep time when I monitor WWV for the time signals. They still work okay, so why tear them apart? I did buy a Times Indiglo traveling alarm clock for ten bucks and I pulled it apart when I got it home, to see what was inside, then put it back together. I don't remember much other than the thing was jury rigged inside to correct some major booboos they made in the original PC board. It used two AAA cells to power it, so it's no big deal to wear them down and replace them.

> Mark L. Fergerson

BTW, It's alright for the indiglo to glow in the dark, but if _you_ start to glow in the dark, then there's a problem!

OT: Didja hear about the Concorde? It was using Firestone tires!
<G!>

1089. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a972e5.711459@news.akorn.net>
Source record: 181681

On Sun, 27 Aug 2000 17:10:06 GMT, Cory Papenfuss
<papenfus@juneau.ece.uiuc.edu> wrote:

> I was just wondering if the large base-loading coil flavor of the
>10-11M antenna (with the 4-10" diameter 5-10 coil free-air loading coil)
>is better than the continuously-loaded 5/8 wave fiberglass type.

Cory,

Are you talking abourt CB antennas, that are mostly made to sell
rather than to work?

5/8 wl of wire on a 6 foot whip radiates like a 6 foot long antenna,
or worse. It will be a small amount worse than a full size 1/4 whip.
Winding more wire than necessary on it to make it resonant makes iut
WORSE, not better.

A base loaded antenna will be a tiny bit worse than a full size 1/4 wl
whip, all other things equal.

All that crap is just a sales gimmick, like the little hoops CB'ers
buy and mount near the bottom of the antennas.

73 Tom

1090. Re: 2meter/440 ant from a CB - ???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: lousherry@jps.net
Message-ID: <39A97D9A.C506403B@jps.net>
Source record: 181682

Tim
Ive tried to go the route of modifying an CB antenna. Its lots of fun but in all the times I went that route it ended up costing me even more money them just going out the buying what I needed. As I said its lots of fun to build your own and would probably do it again realizing its going to cost me more.
Lou
KB6FFT

Tim Moore wrote:

> I have an old CB base antenna - not sure of the name- but its 7 ft tall
> vert whip. Can I cut this back to 5'11" and use it for both 2 m and 440
> bands??? Looking for suggestions.
>
> --
> Tim Moore
> Transmitting to you "Live" from Fredericksburg, VA
> tim@tm52.com

1091. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: rattlehead@my-deja.com
Message-ID: <8oc48o$a7l$1@nnrp1.deja.com>
Source record: 181683

In article <39a4785b.12197571@news.mcn.org>,
k6mhe@arrl.net (Dan Richardson) wrote:
> A ground rod is a *very* poor RF ground... You may wish to re-think
> that.
>
what would you suggest? I need help.

--
"As flies to wonton boys are we to the gods;
they kill us for thier sport."
-- 'Brave New World'

Sent via Deja.com http://www.deja.com/
Before you buy.

1092. Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8oc3ch$m67$1@slb6.atl.mindspring.net>
Source record: 181684

OK, I've ordered me a new 2 meter mobile radio, should be here next week. In the meantime, I have to decide what kind of antenna to get to use with it.

I have looked at three that I am pondering. The first is a Yagi. Good gain (13db),
but very directional from what I understand. As I recall, runs about 110 for the one I saw.

The next is a dedicated 2 meter vertical antenna. At around 99 bucks a good deal and is omni-directional, and had about 6 db gain.

Finally, there is the multiband discone antenna RS sells for 60 bucks. Best price, but since it's a multiband it is sure to have some performance degradation at 2m versus an antenna designed for 2m. However, when I finally upgrade to general I'll already have an antenna up.

Most of the repeaters are north and west of my house, however there are a few south and east I'd like to try as well, which makes me undecided about the Yagi. Is it worth it to go out and spin it around when I want to make contacts in a different direction, or is the extra 7 db worth it?

Any thoughts?

Robert, KG4FGN

1093. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Peter Murtha <peter.chicago@rfways.demon.co.uk>
Message-ID: <a6QttBA7HFq5Ew8D@rfways.demon.co.uk>
Source record: 181685

In article <13841-39A2CE25-32@storefull-118.iap.bryant.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>
>In this newsgroup Roy Lewallen recently faulted Bill Orr for a claim
>that the folded unipole could be less lossy than a straight vertical
>antenna, after I said you could probably rely on Bill Orr.
>
>Eb Laport says, the drivepoint resistance of a folded unipole with a
>pair of identical conductors will be 4 times that of a similar straight
>vertical antenna.
>
There are real advantages to using a folded monopole, especially at MF,
but whenever the antenna is electrically short.
Folding the antenna, changes the sign of the input reactance, and the
positive input reactance of a short monopole allows the use of a
capacitor to bring the system to resonance.
Capacitors generally have lower loss than inductors when used to match
an electrically short antenna.
The impedance transformation obtained by using the folded system also
reduces the losses in the antenna tuning unit.
Finally, the fold wires form a cage around the mast, which results in an
increase in effective radiator diameter.
The result is a wider operational bandwidth.
The folded monopole will not reduce ground losses, and is not a
guaranteed protection against lightening strikes, but it will usually
outperform an equivalent base insulated mast in efficiency, bandwidth
and inherent resistance to lightening induced damage.
Peter, G3WZG.

--
Peter Murtha

1094. Re: UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39A99482.C8338AFA@saber.net>
Source record: 181686

Robert,

Your English is no doubt better than my German.

It might be easier for you to use two antennas, one horizontal, for one station (if that makes it readable), and one vertically polarized, for the other. I seem to recall seeing that kind of thing when I was in Germany in the 1980's and earlier.

Cortland
(ka5s@saber.net)

"Robert BIOWSKI, M.D." wrote:

> First, thank you for your replies.
>
> I didnot write the original message in English because these technical terms
> are very difficult for a native German speaker.
>
> That radio station is FUNRADIO (www.funradio.sk) and the antenna is made
> by WITTENBERG.
>
> Now I have another question. What do you think will happen with the local radio
>
> signals when I turn the antenna 90 degrees? Now I can receive them with 72
> to 78 dB, a minus of 30 dB would be too much.
>
> Robert

1095. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <8oc593$bb2$1@slb2.atl.mindspring.net>
Source record: 181687

How far away are the repeaters? Is your location high and clear
or down in a hole?

I wouldn't buy anything until I got the radio. I'd put a 1/4 whip made
out of a wire into a pl-259 and see which repeaters I could hit.

Next step would be to make a 1/4 wave ground plane from an SO-239
and some wire and get that high & clear. If I was way off with that from
hitting the repeaters I wanted to hit, I'd get the yagi & a rotor. If there
was
just a little noise, I'd get the 2m vertical.

Much of the fun of ham radio is making do with what you have. Most of
the learning comes from that as well. Don't be too quick to spend your
money when there are low cost/no cost alternatives. Take the money
you save on an antenna and buy a vhf swr meter. You'll have a tool,
have learned something and be more self-sufficient.

73,
Tom - N1MM

KG4FGN <kg4fgn@mindspring.com> wrote in message
news:8oc3ch$m67$1@slb6.atl.mindspring.net...
> OK, I've ordered me a new 2 meter mobile radio, should be here next week.
In
> the meantime, I have to decide what kind of antenna to get to use with it.
>
> I have looked at three that I am pondering. The first is a Yagi. Good gain
> (13db),
> but very directional from what I understand. As I recall, runs about 110
for
> the one I saw.
>
> The next is a dedicated 2 meter vertical antenna. At around 99 bucks a
good
> deal and is omni-directional, and had about 6 db gain.
>
> Finally, there is the multiband discone antenna RS sells for 60 bucks.
Best
> price, but since it's a multiband it is sure to have some performance
> degradation at 2m versus an antenna designed for 2m. However, when I
finally
> upgrade to general I'll already have an antenna up.
>
> Most of the repeaters are north and west of my house, however there are a
> few south and east I'd like to try as well, which makes me undecided about

> the Yagi. Is it worth it to go out and spin it around when I want to make
> contacts in a different direction, or is the extra 7 db worth it?
>
> Any thoughts?
>
> Robert, KG4FGN
>
>
>
>

1096. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39A99926.8084B443@saber.net>
Source record: 181688

rsm wrote:

> Does anything really work very well?

Not really! Mobile operation on 80 is a series of compromises.

To avoid ground losses, you need an antenna mounted on top pf the vehicle. But there is a height limit of 13 feet 6 inches on most roads (and there ARE lower objects over many roads!) so if your vehicle is, say 5 feet tall, you can only use 8 1/2 feet for antenna.

Then you need a low-loss coil, A big Bugcatcher coil works pretty well, the bigger the better, too, except for the fact that you want it up a few feet in the air and it's hard to hold it there against inertia and wind. Things get easier if you can use a top-hat instead of a whip, as the coil can be moved higher. But all the problems of mounting a coil get worse the higher it goes. The top-hat should not be TOO close to the coil; you want its capacitance to be versus ground, not the coil turns. I have used a top hat up to 7 feet across, made from plumbing fittings and replacement auto-antenna whips from Radio Shack. This sort of antenna ends up needing either a REALLY heavy mast and mount, or guys. Or both!

But if you DO put an antenna like that on your car's roof, you daren't put anything else under it, as even a moderately sized VHF antenna will change the tuning of the top hat as the VHF whip sways in the wind.

In the end, you use what you can come up with. My home brewing experiments with Bug-Catchers led to a monster mag-mount. I mean to try a Screwdriver on it, with about a 3 to 5 foot top hat. The little white car already has enough dents to look like a golf ball, so if five, five inch magnets on an 26 inch triangular base aren't enough, I can always shrug it off to experience and start drilling.

Oh yes, you don't get a guaranteed 13 1/2 feet of clearance, though that's the Federal standard. I had a tree branch lift my antenna AND mount off the roof one night and smash a rear-quarter window. Saw blades on the next one!

Good luck!

Cortland
(ka5s@saber.net)

1097. A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39A999D9.720DD6C7@attglobal.net>
Source record: 181689

I just want to address Chip and the others on the NG briefly.

First, I'm relatively new, so I asked an intelligent question about what was fractenna, One gentleman came back with a very intelligent reply...one of the regulars and not one of the Fractenna group (as was explained), but gave me a very clear understanding of what and not who, a Fractenna was, and said nothing bad about him or them. this pretty much cleared things up for me.

You will notice I didn't really post anymore about it.

A week or so later I saw a link to the Fractenna site so I looked at it and from my perspective of not knowing a whole lot about the concept (or antenna theory in any great depth) , It looked fascinating. I asked some intelligent questions, like what holds it together under snow, ice (only to realize that I was looking at the little two meter version)

Here is my problem right now. I seemed to have generated quite a stir for a simple little question and now I know why.

It seems like Fractenna gets a lot of abuse from the group... and as I see it, any ASSHOLE who re-posts a personal (partial) email completely out of context deserves everything he gets. Chip, don't give me any of your bullshit that the email was not marked confidential. That's the biggest bunch of crap I've ever heard. So what are you, an engineer or a lawyer. If you're not a lawyer, may you should study to be one. It will save you a ton of money for all of the people you need to sue for liable and patent infringements and God knows what else.

To set the record straight, I also noted that most of the people on the NG are way above my head in their level of engineering, and the degree of knowledge and theory each of you brings to the table. In other words. what I'm saying is You all know a heck of a lot more than I do, why would I judge?

I truthfully thought that Fractenna was some kind of joke or someone posting stuff about a fractenna as a troll.

From the outside looking in, it would not be hard to misjudge what one is reading.

So, let it be clear, I have nothing against anyone out there, I was just asking a simple question.

When you walk into this NG you see all this Fractenna stuff and all these posts about suing, liable, etc., etc. and you so have to wonder what the heck is going on because there's no threat of lawsuits, on any

other threads as you guys discuss in great depth antenna theory.

I've been on other newsgroups, and sometimes there is someone out there with no interest in the group (other than to stir up trouble) making all kinds of ridiculous statements and antagonizing the others in the group. these people are called trolls.

This is how it started... I loffed into the NG and rather than take about 1250 posts, I selected 100. After downloading a hundred topics guess what I was... HUGE threads with all these posts and people yelling and someone else out there threatening to sue everyone (not mentioning any names here). From my perspective it looked to me like that's what this guy calling himself Fractenna seemed to be doing. Keep in mind, this is strictly from the surface and how it appeared to me as I downloaded the first group of messages from the NG (yes, i was on a long time ago a couple of times, but there wasn't any Fractenna stuff going around). And obviously... this is why I asked?

So, If my intentions or the nature of my question wasn't clear, I hope it is now. Sorry for all the trouble I've caused!

Wayne

Go ahead Chip... sue me!

1098. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8oc6uo$35p$1@plutonium.btinternet.com>
Source record: 181690

It all depends on how well you wan't it to work. Think
quantitatively/numerically.

If you go up to a height which will just allow you to pass
under bridges, with a helical antenna on the roof of your
vehicle on 80m you should be able to put out a signal which
is only 2 or 3 S-units less than a 1/2-wave dipole at a
height of 60 feet.

By 'helical' I mean a winding on a 2" diameter former,
space-winding using 10 awg enamelled wire or larger,
extending for 3/4 of the overall height. Top 1/4 is the
tuning rod. Very narrow bandwidth - only a few kHz.

Such an antenna does surprisingly well on 160m too. 60 miles
via groundwave at noon. If you try hard, trans-atlantic via
the F-layer during long, dark, quiet, winter nights using
400 watts.

Take a look at G3YXM's website. (Sorry. I can't find his
url).

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp
----
rsm <rsm@magpage.com> wrote in message
news:8obtf9sak0@216.155.62.87...
> Does anything really work very well?

1099. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39A9A448.799D26C0@haertig.com>
Source record: 181691

How does it improve efficiency?

Gray

Peter Murtha wrote:
>
> In article <13841-39A2CE25-32@storefull-118.iap.bryant.webtv.net>,
> Richard Harrison <richardharrison@webtv.net> writes
> >
> >In this newsgroup Roy Lewallen recently faulted Bill Orr for a claim
> >that the folded unipole could be less lossy than a straight vertical
> >antenna, after I said you could probably rely on Bill Orr.
> >
> >Eb Laport says, the drivepoint resistance of a folded unipole with a
> >pair of identical conductors will be 4 times that of a similar straight
> >vertical antenna.
> >
> There are real advantages to using a folded monopole, especially at MF,
> but whenever the antenna is electrically short.
> Folding the antenna, changes the sign of the input reactance, and the
> positive input reactance of a short monopole allows the use of a
> capacitor to bring the system to resonance.
> Capacitors generally have lower loss than inductors when used to match
> an electrically short antenna.
> The impedance transformation obtained by using the folded system also
> reduces the losses in the antenna tuning unit.
> Finally, the fold wires form a cage around the mast, which results in an
> increase in effective radiator diameter.
> The result is a wider operational bandwidth.
> The folded monopole will not reduce ground losses, and is not a
> guaranteed protection against lightening strikes, but it will usually
> outperform an equivalent base insulated mast in efficiency, bandwidth
> and inherent resistance to lightening induced damage.
> Peter, G3WZG.
>
> --
> Peter Murtha

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX

gfh@haertig.com

1100. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a9a4a7.13451482@news.akorn.net>
Source record: 181692

Hi Peter

On Sun, 27 Aug 2000 00:25:47 +0100, Peter Murtha
<peter.chicago@rfways.demon.co.uk> wrote:

>There are real advantages to using a folded monopole, especially at MF,
>but whenever the antenna is electrically short.
>Folding the antenna, changes the sign of the input reactance, and the
>positive input reactance of a short monopole allows the use of a
>capacitor to bring the system to resonance.

You have to be careful there.

The differential mode impedance is inductive, and the hairpin monopole can be matched with capacitors, but it is NOT more efficient than a conventional monopole of the same height. As a matter of fact, it is less efficient unless great care is taken to minimize conductor resistance in the antenna.

The reason for the lack of effficiency is the hairpin monopole (an electrically short folded monopole) has high circulating currents that involve the entire radiator. The VAR power is very high, worse than in a conventional inductor loaded antenna.

So while you decrease loss in the loading inductance by "removing it" and using a higher Q lower ESR capacitor, you add a new loss mechanism that involves even more conductor resistance and even higher circulating currents.

The only real advantage of a hairpin monopole is it allows two capacitors to be adjusted to move the antenna over a very wide frequency range. If large diameter high conductivity conductors are used in conjunction with vacuum capacitors, efficiency becomes about the same as a base loaded system.

>Capacitors generally have lower loss than inductors when used to match
>an electrically short antenna.
>The impedance transformation obtained by using the folded system also
>reduces the losses in the antenna tuning unit.
>Finally, the fold wires form a cage around the mast, which results in an
>increase in effective radiator diameter.
>The result is a wider operational bandwidth.

The hairpin monopole has very restricted BW on frequencies where the radiator is a small fraction of a wavelength long. That is because VAR power is so high. Matching losses are less, if you don't consider circulating currents in the antenna part of "matching losses". If you

do consider I^2 R conductor losses in the antenna as matching losses (they are certainly real losses) then you have to consider them antenna losses.

On 3 MHz, some military hairpin monopoles are made from brass so they are "de-Qed" enough to handle a SSB voice channel!

73 Tom

1101. Re: You Might Be a Redneck if.....Was: You Know You Are----------

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39A9AA4B.50DE@bellsouth.net>
Source record: 181693

Guyton wrote:
>
> Jerry Oxendine wrote:
> >
> > And you might be a Redneck if.....
Guyton,

See there, we CAN have fun on the newsgroup without getting mad! LOL!
I do remember the days when having a multitude of antennas was the only
way. My screwdriver took care of 3 of them (75M, 10M, and 6M).

BTW, I had a new experience today. I was travelling in the mobile and
one of the guys suggested we QSY up to 29.000 MHZ and do a little AM
work. Before you know it we had several stations on AM, including
California (I'm in NC), for a nice QSO. It was FUN. I hadn't really
tried my IC706 on AM before, but everybody said it sounded fine.

73

Jerry
K4KWH

> > Your mobile has more antennas in the air than wheels on the ground! LOL!
>
> I resemble that remark!!!!

1102. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a9a7f8.14301257@news.akorn.net>
Source record: 181694

On Mon, 28 Aug 2000 00:07:55 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>There's no noticeable difference between any of them. Just
>put up the most simple and least expensive - a quarterwave
>vertical and be done with it.
>----
>Reg

Actually there is a difference Reg. Some CB antenna manufacturers wind
so much wire on the fiberglass whip that is actuall develops out-of-
phase current areas.

That places a null at ground level, and most other angles. It also
adds needless resistive losses.

CBers buy the antennas, because they "have more wire inside".

They remind me of fractal antennas.

73 Tom

1103. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39a9a8a1.14469637@news.akorn.net>
Source record: 181695

On Sun, 27 Aug 2000 15:41:42 -0700, Cortland Richmond <ka5s@saber.net>
wrote:

>To avoid ground losses, you need an antenna mounted on top pf the
>vehicle. But there is a height limit of 13 feet 6 inches on most roads
>(and there ARE lower objects over many roads!) so if your vehicle is,
>say 5 feet tall, you can only use 8 1/2 feet for antenna.

Ground losses are about the same on 80 meters no matter where you
mount the antenna. The vehicle, unless you have a Mack truck, is too
small in terms of wavelength to have distributed impedance problems.

Mounting up high is sometimes better because it keeps the electric
field of the antenna above the loading coil further away from
sheetmetal.

73 Tom

1104. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39A99FB7.E722904@dialpoint.net>
Source record: 181696

Just how do you plan on running either of the antennas mobile ? Go with
the vertical as you will have a hard time tracking the repeaters with a
beamwhile mobile.

KG4FGN wrote:
>
> OK, I've ordered me a new 2 meter mobile radio, should be here next week. In
> the meantime, I have to decide what kind of antenna to get to use with it.
>
> I have looked at three that I am pondering. The first is a Yagi. Good gain
> (13db),
> but very directional from what I understand. As I recall, runs about 110 for
> the one I saw.
>
> The next is a dedicated 2 meter vertical antenna. At around 99 bucks a good
> deal and is omni-directional, and had about 6 db gain.
>
> Finally, there is the multiband discone antenna RS sells for 60 bucks. Best
> price, but since it's a multiband it is sure to have some performance
> degradation at 2m versus an antenna designed for 2m. However, when I finally
> upgrade to general I'll already have an antenna up.
>
> Most of the repeaters are north and west of my house, however there are a
> few south and east I'd like to try as well, which makes me undecided about
> the Yagi. Is it worth it to go out and spin it around when I want to make
> contacts in a different direction, or is the extra 7 db worth it?
>
> Any thoughts?
>
> Robert, KG4FGN

1105. Re: What's my Antenna Problem???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39a9a316.435122@news.mcn.org>
Source record: 181697

On Sun, 27 Aug 2000 22:21:26 GMT, rattlehead@my-deja.com wrote:

>In article <39a4785b.12197571@news.mcn.org>,
> k6mhe@arrl.net (Dan Richardson) wrote:
>> A ground rod is a *very* poor RF ground... You may wish to re-think
>> that.
>>
>what would you suggest? I need help.

I can suggest something along the lines of what I am using....

I have installed (just outside the shack) a ground rod. To this rod I
have attached about 14 radial wires. These wires vary in length from
as short as about 12 feet to one wire which is over 70 feet long.
These wires are spread out in a fan shape over 180ï¿½. The wires are
laid below the surface of the ground by about 2-3 inches.
Additionally, to the ground rod I have attached a 3-4 foot length of ï¿½
inch copper tubing which is brought inside the shack were all the
equipment is connected to it.

This has served well.

Remember RF doesn't penetrate too far into the soil and by having a
lot of radial wires you will provide a good path to ground for RF.

There may be better system than what I am using but I am happy with
it.

I hope this helps.. If not email me.

vry 73
Danny, K6MHE

1106. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <=7ypOarrk3CjGUsMuphs+cfYkSqH@4ax.com>
Source record: 181698

"KG4FGN" <kg4fgn@mindspring.com> wrote:

>OK, I've ordered me a new 2 meter mobile radio, should be here next week. In
>the meantime, I have to decide what kind of antenna to get to use with it.
>

>
>Any thoughts?
>
> Robert, KG4FGN

A little mobile whip or hombrew 1/4-wave ground plane fed with about
25 watts will probably hit most, if not all, repeaters within a 20-30
mile radius, if not further out, especially if the repeater antennas
are of a decent height. Start with the least antenna you need. You
don't really require a beam for repeaters, unless you're trying to hit
some very distant city.

Bob
k5qwg
>
>
>

1107. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39A9C000.239EECAB@saber.net>
Source record: 181699

For 80 and 160, I've found a shorter antenna, mounted on the roof, works better than a longer one with the same tip height, frame mounted. I've seen this ascribed to concentration of ground current near the feed point, which does sound logical. It is in no way to be ascribed to the perfomance of the car's body as an efficient counterpoise, the car being much too small for that. But even a sheet steel roof has less resistance than the same area of asphalt or concrete roadway. Also, avoiding vertical parts of the car does reduce cancellation of radiation by nearby opposing currents.

Cortland
(ka5s@saber.net)

Tom W8JI wrote:

> On Sun, 27 Aug 2000 15:41:42 -0700, Cortland Richmond <ka5s@saber.net>
> wrote:
>
> >To avoid ground losses, you need an antenna mounted on top pf the
> >vehicle. But there is a height limit of 13 feet 6 inches on most roads
> >(and there ARE lower objects over many roads!) so if your vehicle is,
> >say 5 feet tall, you can only use 8 1/2 feet for antenna.
>
> Ground losses are about the same on 80 meters no matter where you
> mount the antenna. The vehicle, unless you have a Mack truck, is too
> small in terms of wavelength to have distributed impedance problems.
>
> Mounting up high is sometimes better because it keeps the electric
> field of the antenna above the loading coil further away from
> sheetmetal.
>
> 73 Tom

1108. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <h5hjqssptr94d1r9ehb5nv0jtp31rlhbbe@4ax.com>
Source record: 181700

ROFL!

-SSB

On or about Mon, 28 Aug 2000 01:24:29 GMT, kk5yy@arrl.net (Gerald
Schmitt), using the forum rec.radio.amateur.antenna did say:
:
:Sorry Chipper the bottom line is that you are a twirp and
:apparently were not rased right, sue your parents.

1109. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39A9CBB3.21EB0894@eznec.com>
Source record: 181701

Gerald Schmitt wrote:
>
> I have to agree with you Fracadolf reposted my email also
> apparently the rules of good conduct and gentlemanly behavior
> simply don't apply to Nathan the twirp.
>. . .

I've always considered all email to be private and confidential unless the sender specifically gives me permission to reveal it, and feel that this is simply common courtesy and considerations for others. I always have, and always will, adhere to this standard, as I believe most others do. But I've come to find out that other standards prevail. Chip has stated quite a number of times that he considers it acceptable to publicly post the contents of any email not specifically marked "private" or "confidential", and has posted a number of email messages sent to him. Regular readers of this newsgroup should be aware of his policy, but newcomers are blindsided from time to time. Does anyone know if this is a general practice, or if it is, as I hope, unusual?

Roy Lewallen, W7EL

1110. Re: Clarification of my question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8ocij2$vt3$1@slb2.atl.mindspring.net>
Source record: 181702

Reg:

Yes, of course, radiation was the user's intention.

He just didn't think the 20 feet of ground wire was going to be doing the radiation, heh, heh.

Speaking of good grounds and ground leads, I once had an abode in Miami, FL near where the International Ground comes ashore from Europe.

As you know, the continents are all hooked up together to the International Ground by a series of undersea cables. Lord Kelvin pioneered this concept, around the same time as the time zone system was set up at the turn of the prior century. I think it was Oliver Heaviside who perfected the International Ground system.

Well a few years ago I lived in South Miami, Florida, just a couple of blocks from Dinner Key where the International Ground terminates in America.

One night I snuck over and hooked my station ground up to that big International Ground cable. It's 0000 guage copper, big sucker...

My ground lead was about 1200 feet long since I was living about a half a block from Dinner Key, and I had to quietly drill a small hole in the side of the 0000 guage Big Ground Wire and tap it to take a small copper screw and ground lug for my ground lead.

Wow!!!

What an effect that had. At my QTH, European signals jumped right up out of the noise by at least 20 dB.

But before morning the US Coast Guard discovered my ground tap on the International Ground and removed it under threat of me doing time in the brig.

I wonder if any other hams have had the good luck to hook their station ground up to the International Ground grid?

Regards,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:8oaotc$t8q$1@plutonium.btinternet.com...

> 20 feet of wire with a 'perfect' ground on the other end is
> a jolly good antenna when fed at the top. It radiates
> excellently.
>
> Isn't that precisely the users intention ?
> ----
> Reg
>
>
>

1111. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <1ijco8.0f3.ln@mail.specsol.com>
Source record: 181703

Roy Lewallen <w7el@eznec.com> wrote:

> I've always considered all email to be private and confidential unless
> the sender specifically gives me permission to reveal it, and feel that
> this is simply common courtesy and considerations for others. I always
> have, and always will, adhere to this standard, as I believe most others
> do. But I've come to find out that other standards prevail. Chip has
> stated quite a number of times that he considers it acceptable to
> publicly post the contents of any email not specifically marked
> "private" or "confidential", and has posted a number of email messages
> sent to him. Regular readers of this newsgroup should be aware of his
> policy, but newcomers are blindsided from time to time. Does anyone know
> if this is a general practice, or if it is, as I hope, unusual?

> Roy Lewallen, W7EL

The vast majority of people I know, including myself, agree with your
practice.

Jim Pennino

1112. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39a9d82f$0$83656$45beb828@newscene.com>
Source record: 181704

Me, I got a mag-mount for a car and a small Larson antenna (about 18 inches with a buldge in the middle; $28 I think). Put it in the attic (wood), ran coax down and it works great.

Very discrete too.

--jeffrey

In article <8oc3ch$m67$1@slb6.atl.mindspring.net>, kg4fgn@mindspring.com says...
>
>OK, I've ordered me a new 2 meter mobile radio, should be here next week. In
>the meantime, I have to decide what kind of antenna to get to use with it.
>
>I have looked at three that I am pondering. The first is a Yagi. Good gain
>(13db),
>but very directional from what I understand. As I recall, runs about 110 for
>the one I saw.
>
>The next is a dedicated 2 meter vertical antenna. At around 99 bucks a good
>deal and is omni-directional, and had about 6 db gain.
>
>Finally, there is the multiband discone antenna RS sells for 60 bucks. Best
>price, but since it's a multiband it is sure to have some performance
>degradation at 2m versus an antenna designed for 2m. However, when I finally
>upgrade to general I'll already have an antenna up.
>
>Most of the repeaters are north and west of my house, however there are a
>few south and east I'd like to try as well, which makes me undecided about
>the Yagi. Is it worth it to go out and spin it around when I want to make
>contacts in a different direction, or is the extra 7 db worth it?
>
>Any thoughts?
>
> Robert, KG4FGN
>
>
>
>

1113. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8ocncofkr2@slb6.atl.mindspring.net>
Source record: 181705

"Dale Parfitt" <GTE/parinc@GTE.net> wrote in message
news:39A9C731.68232DA4@GTE.net...
> The R.S. discone's wideband characteristics end around 120 MHz. The 30-50
> coverage is achieved as a groundplane and is very narrow band- this
antenna will
> not give you frequency coverage at HF- which is what I think you are
referring
> to w/ your upcoming general class license.

Thanks Dale, since this antenna is not very good at HF I think it's out.
I'll think about the others.

I have plans and parts to build some antennas, but have been having a real problem with my time lately. I've been working six days a week, then helping the wife with 21 month old and 7 week old daughters, plus trying to find time to study for my general so I've had zero spare time. That's why I was looking to buy rather than build right now.

Robert, KG4FGN

1114. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8ocncnfkr1@slb6.atl.mindspring.net>
Source record: 181706

Sorry, guess I should have made it clear. In the car I have a mag mount antenna. What I was looking for was something to use at the house, to mount up high.

KG4FGN

"Ralph Mowery" <rmowery@dialpoint.net> wrote in message news:39A99FB7.E722904@dialpoint.net...
> Just how do you plan on running either of the antennas mobile ? Go with
> the vertical as you will have a hard time tracking the repeaters with a
> beamwhile mobile.

1115. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8ocncpfkr3@slb6.atl.mindspring.net>
Source record: 181707

"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:39a9d82f$0$83656$45beb828@newscene.com...
> Me, I got a mag-mount for a car and a small Larson antenna (about 18
inches
> with a buldge in the middle; $28 I think). Put it in the attic (wood),
ran
> coax down and it works great.
>
> Very discrete too.

Jeffery,

I currently have 8 acres of land and live out in the country in an area with none of those housing covenants, so I don't have to be discrete. <GRIN> (One of the reasons I bought the house was so I could put up antennas!)

However, the mag-mount does give me the idea of taking one of my spare mag mounts and attaching it to the side of the house. At any rate, I'll try it and see how I get out. It might do until I have time to build something myself. Then, as someone suggested, I can put the money towards a good meter or something.

Thanks to all of you who replied!

Robert, KG4FGN

1116. Re: Homebrew Helical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Joaquin <joaqcarl@teleline.es>
Message-ID: <39A8BD23.F6FD0918@teleline.es>
Source record: 181752

Hello Harry!!

I think that would can be very interesting for you the list server
http://www.qth.net devoted to antennas.

Best regards from BCN

Joaquin

Harry Stone wrote:
>
> Can someone please direct me to information about helical antennas. I am
> interested in building a few jus to see what happens.
> Tnx
> 73
> Harry
> ke6tcg
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1117. MFJ-1792 vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bjorn Mohr <bm@broadcast.se>
Message-ID: <Fn5q5.2052$gr.136066@nntp1.chello.se>
Source record: 181753

Anyone have experience of the MFJ-1792 2-40m vertical antenna?

73 de SM0MDG

1118. Re: Clarification of my question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8oaotc$t8q$1@plutonium.btinternet.com>
Source record: 181754

20 feet of wire with a 'perfect' ground on the other end is
a jolly good antenna when fed at the top. It radiates
excellently.

Isn't that precisely the users intention ?

Reg

1119. Fractal patent,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Jacobson <info@vhfteknik.se>
Message-ID: <8oaq4g$sm2$1@zingo.tninet.se>
Source record: 181755

Reading with great interest abt. the Fractal BUT how do you explain that for
a chinaman way out in china who has some info
from a brothers cusins mother brother in law!!!!!! ?????. Very interesting
because he will sell them anyway !!
rgds
SM7DTT

1120. Re: Fractal patent,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000827064754.15234.00000242@ng-mf1.aol.com>
Source record: 181756

>Reading with great interest abt. the Fractal BUT how do you explain that for
>a chinaman way out in china who has some info
>from a brothers cusins mother brother in law!!!!!! ?????. Very interesting
>because he will sell them anyway !!
>rgds
>SM7DTT

Pirates always take risks. These include doing inadvertant (and obviously unauthorized)marketing for the legitimate IP holder.

Ultimately, after doing the prototyping, and manufacturing and perhaps even shipping, they end up 'up the creek' with the pirated product sealed in some warehouse and ultimately destroyed. Or worse--they have some customers using the pirated product (while patent pending) with no follow-up source.

Goodbye customer!

73
Chip N1IR

1121. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8oarqm$3h2$1@plutonium.btinternet.com>
Source record: 181757

Frac, which came first, you, the transistor, or the method
of moments ?

1122. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: burke_br@freemark.com
Message-ID: <39a8f399.3219154@news.surfree.com>
Source record: 181758
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

On Sat, 26 Aug 2000 22:46:22 +0800, "Dan Jacobson"
<jidanni@kimo.FiXcomTHiS.tw> wrote:

>Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
>walkman listening to an AM station gets close to it, I hear a
>OoooOoooOoooOooo sound, indication that it is somehow putting out radio
>signals. I thought pagers, like walkmans, just received signals, not
>emitting... Would a pager then be supposedly more worrisome healthwise
>than a walkman when close to the body all day? But if I were to put it in
>my backpack to be away from the body, I could not be alerted in noisy
>environments or at meetings, both of which I use the vibration alert
>selection for.
>--
>www.geocities.com/jidanni ... fix e-mail address to reply; n
>Tel:+886-4-5854780; starting in year 2001: +886-4-25854780
>
>

The pager has an oscillator in it which drives the microprocessor as
well as provides for the generation of Intermediate Frequencies within
the pager for demodulation and frequency tuning purposes. It is
extremely low power, which is why you don't hear anything until your
walkman gets very, very close to the unit.

Your walkman is designed to pick up signals measuring in the range of
a millionth of a volt. (0.000001)

BTW - your walkman has an oscillator in it too, just on a different
frequency as not to interfere with itself. You have nothing to be
concerned about regarding your health. You get far more radiation from
the sun.
Regards,

Bruce
Hitting Reply is Futile
*Use the folllowing:
(flzapped@fcmail.com)

1123. Re: Spiral end loading

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Dennis <wa8shc@stratos.net>
Message-ID: <967376487.468678@newscache.cleveland.core.com>
Source record: 181759

Check www.wr6wr.com which is the WorldRadio magazine web site. There used to be an article there on ur linear pancake loading coils

--
Dennis wa8shc

Jim Pennino <jimp@mail.specsol.com> wrote in message news:g5f7o8.jpr.ln@mail.specsol.com...
> A few years back some articles appeared about end loading using spiral
> wound coils.
>
> The major claim for this technique was with judicious selection of the linear
> section and the spiral loading coil, you could obtain 2 band operation with
> an input impedance close to 50 ohms on both bands.
>
> Anyone have any real info on this, tried it, or modeled it?
>
> Jim Pennino
>

1124. Re: Homebrew Helical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ob1d2$584$1@nnrp1.deja.com>
Source record: 181760

Harry,
You need to go back a ways, like to, 1974!
The ARRL Antenna Handbook published an artical:
"A YAGI ANTENNA WITH HELICALLY WOUND ELEMENTS"
It was a 2 element mon-bander for 40 M. 18 ft elements spaced 15'8"
apart. The design includes a matching xformer.
Also in the same handbook is:
"SHORT HELICALLY WOUND VERTICAL ANTENNAS"
I have built a couple of these for mobile use (10M) and they work quite
well. (Most HF mobile antennas are helical).

Perhaps the ARRL can send you copies of these.... If not e-mail me I
maybe able to e-mail you images of the pages.

73 Den W2DEN _._

In article <39a7fbc1_5@news.newsfeeds.com>,
"Harry Stone" <ke6tcg@juno.com> wrote:
> Can someone please direct me to information about helical antennas.
I am
> interested in building a few jus to see what happens.
> Tnx
> 73
> Harry
> ke6tcg
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>

--
Den Spiess

Sent via Deja.com http://www.deja.com/
Before you buy.

1125. Re: Diople, Diople, which dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ob281$6ac$1@nnrp1.deja.com>
Source record: 181761

First congrats on the General...
Second... you can not beat a ladder (450 ohm) line fed dipole for SIMPLE multi-band use. Put up as much wire as you can, as high as you can. No need to make it for any one band. (Making it resonant on a band be more of a hinderance than a help) If you can get it over 100 feet long you will be able to work 80. If you are restricted in length you can tie the two ends of the feed line together at the tuner and work it as a vertical with a BIG cap hat for the lower band(s).
And, you didn't mention 30,17 or 12! All will be accessible thru this type of antenna!
As mentioned if you have trouble tuning a band add a little ladder line... it should help. There will be a conbinmation of antenna / feed line length that will work on all bands.
Feed it with ladder line thru a balun (4:1 is OK... if one is not in ur tuner roll your own... very easy to do!)then into a good tuner. Once you have the tuner settings for each band you will be able to go right to them....
Enjoy
73
Den W2DEN _._

In article <20000825191434.02089.00000195@ng-cd1.aol.com>, paceral@aol.com (PacerAl) wrote:
> Just got my general and want to get on HF bands. Looking at putting up an off
> center dipole for 10,15,20, and 40 meter as described in the Feb 1996 issue of
> QST (pg. 65). In this setup it calls for a length of 55ft of 450 ohm ladder
> line into the shack with connection to the radio through a 1:1 Balun for 15
> meter and a 4:1 Balun for 40.20, 10. Would have to change Baluns for the 2
> FREQ ranges. Connection between Balun and radio with short piece of 50 ohm
> coax. The Carolina Windom 40 uses this type-offset dipole but utilizes 10 ft of
> ladder line with two "special" line isolators. I'm looking for some words of
> wisdom as to what direction to go and the benefit of using an offset dipole
> with ladder line vs. a STD dipole with equal legs and coax feed line w/o any
> ladder line. I will be using a MFJ 940B tuner. After reading some

of the
> responses on this newsgroup I feel confident I will get some good
advice
>
> 73 al KF4OUA
>
>

--
Den Spiess

Sent via Deja.com http://www.deja.com/
Before you buy.

1126. Re: Butternut users

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Den <dennis.spiess@reckitt.com>
Message-ID: <8ob37t$6vv$1@nnrp1.deja.com>
Source record: 181762

My experience tends to disargree with:

> The ground system will work better in the air than an in ground
> radial system.

I have found, from working with my B'nut both elevated and on the
ground, that:
If you can not get the antenna high enough to "decouple" it from the
ground, performance will be degraded. Minimum height is 1/4 wavelength.
For 20M and shorter this is easy. But for 80, 40 and 30M a vertical
will work MUCH better on the ground, with a radial system, than it will
at a low height such as 20 feet!
I am not saying it won't work, it will radiate, but the B'nut on the
ground with 12 radials will do MUCH better than if it is mounted at 26
feet with 4 radials (the B'nut radial kit) on 30, 40 and 80M!
...
If you are below 1/4 wave in height... think about ground mounting.
73
Den W2DEN _._

Sent via Deja.com http://www.deja.com/
Before you buy.

1127. 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bill, KC8MVW <tracker8565@my-deja.com>
Message-ID: <8ob7ff$b4d$1@nnrp1.deja.com>
Source record: 181763

Hello to the group,
I have built and tuned one of the above antennas, but for some reason it doesn't perform the way it should. I was told that the building that I now reside in was built with a grounded steel mesh under the plaster. I have no way of getting the antenna outdoors and in the "clear." A local ham informed me that there are plans for an indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and should work in my room without a problem. Would anyone know where I can find that site, or have the plans available? Thanks for all the help in advance.
-73's-
BB

Sent via Deja.com http://www.deja.com/
Before you buy.

1128. FA RADIO GEAR LAST HOURS....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: chris fox <cfox007@bellsouth.net>
Message-ID: <39A9221E.EA29531E@bellsouth.net>
Source record: 181764
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi please take a look at all my auctions last hours .

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=418922417

1129. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <2SapOX+J8Swu2SCQZXwofM3RvsRt@4ax.com>
Source record: 181765

Bill, KC8MVW <tracker8565@my-deja.com> wrote:

>Hello to the group,
> I have built and tuned one of the above antennas, but for some reason
>it doesn't perform the way it should. I was told that the building that
>I now reside in was built with a grounded steel mesh under the
>plaster. I have no way of getting the antenna outdoors and in
>the "clear." A local ham informed me that there are plans for an
>indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and
>should work in my room without a problem.

Why would a j-pole transmit through your steel mesh walls when your
current antenna won't? Are you planning to stick the j-pole out the
window?

Maybe I'm misinterpreting your words above, but it sounds like you
want to use the j-pole indoors.

Bob
k5qwg

> Would anyone know where I
>can find that site, or have the plans available? Thanks for all the
>help in advance.
>-73's-
>BB
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

1130. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000827103549.22342.00000252@ng-fc1.aol.com>
Source record: 181766

Please don't let me derail your antenna discussion further--but I appreciate your comment. Admitting a mistake never altered anyones testoserone level, but the myth it does stubbornly prevails!

73

Rick

1131. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39A93655.A9096196@fgi.net>
Source record: 181767

Well what happens Rick?
I posted that I suspect that it would have
omni directional pattern of a vertical, but I
have been more wrong than right in the past.
I think he deserves more than a single response
from a 'hanger on' such as I
Regards
Art Unwin KB9MZ

K1BQT wrote:

> Please don't let me derail your antenna discussion further--but I appreciate
> your comment. Admitting a mistake never altered anyones testoserone level, but
> the myth it does stubbornly prevails!
>
> 73
>
> Rick

1132. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:00:00 UTC
From: Lizard Blizzard <nospam@postoffice.pacbell.net>
Message-ID: <39A935C2.D3135EDA@postoffice.pacbell.net>
Source record: 181768
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

You're probably hearing the LCD display multiplexing circuitry. This is
not really RF, it's just the electrostatic effect of being close to the
display.
If you have a tone tracer 'banana' like telco tech use, you can use it
to detect the same effect. I notice that the older monitor CRTs make a
lot of noise when you hold a tone tracer near it, but the newer energy
efficient and most importantly the low emissions monitors don't hardly
put out anything.

Dan Jacobson wrote:

> Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
> walkman listening to an AM station gets close to it, I hear a
> OoooOoooOoooOooo sound, indication that it is somehow putting out radio
> signals. I thought pagers, like walkmans, just received signals, not
> emitting... Would a pager then be supposedly more worrisome healthwise
> than a walkman when close to the body all day? But if I were to put it in
> my backpack to be away from the body, I could not be alerted in noisy
> environments or at meetings, both of which I use the vibration alert
> selection for.
> --
> www.geocities.com/jidanni ... fix e-mail address to reply; ï¿½nï¿½ï¿½iï¿½ï¿½ï¿½
> Tel:+886-4-5854780; starting in year 2001: +886-4-25854780

1133. Re: FS: Custom, Full-Color QSLs, $30

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:23:05 UTC
From: fractenna@aol.com
Message-ID: <20000826202305.23752.00000159@ng-fc1.aol.com>
Source record: 181745

>N7GSU QSLs offers custom designed, full-color QSLs for $30. These may
>include photos or artwork, single and double-sided - all $30! Our ever
>expanding stock designs, personalized with your information are just $15.
>These include many club designs. Does your club need a custom designed
>logo, club QSL or it's own award certificates, we do 'em!
>
>Check us out at http://www.n7gsu.com
>
>73,
>
>Robin Faulkner, N7GSU QSLs
>

Nice site Robin!

I'm there on the next batch:-)

73
Chip N1IR

1134. Re: UKW, Polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 00:41:06 UTC
From: k6mhe@arrl.net
Message-ID: <39a86324.353205@news.mcn.org>
Source record: 181746

I got this translation via Alta Vista... I'm still confused.

At a distance of approx. 50 km air line sandblasts an extremely
hear-worth radiosender (Funradio) in vertical polarization. In the
auto I can receive this more or less quite well, with my home system
am not so easy this to implement. Dzt. I aligned a 7-Element UKW
antenna of the Fa.Wittenberg in horizontal position there. The result
is not real satisfying (Funradio 40 dB, the local senders continue to
come with 78 dB), i.e. in operationoperation operation is there still
an easy noise. The next step would be now 90 degrees a turn of the
antenna, which considering given conditions would be quite complex
however feasible. Jmd. does experience have and can say whether that
could bring somewhat or is not with UKW with the polarization so
delicately?On Sat, 26 Aug 2000 23:01:59 -0700, "Robert BIOWSKI, M.D."

<robert.biowski@univie.ac.at> wrote:

>In einer Entfernung von ca. 50 km Luftlinie strahlt ein ï¿½uï¿½erst
>hï¿½renwerter Radiosender
>(Funradio) in vertikaler Polarisation ab. Im Auto kann ich diesen mehr
>oder weniger recht
>gut empfangen, bei meiner Heimanlage ist dies nicht so leicht zu
>realisieren.
>Dzt. habe ich eine 7-Element UKW Antenne der Fa.Wittenberg in
>horizontaler Lage dorthin
>ausgerichtet. Das Ergebnis ist nicht wirklich befriedigend (Funradio 40
>dB, die lokalen Sender
>kommen weiter mit 78 dB), d.h. im Stereo-Betrieb ist da noch immer ein
>leichtes Rauschen.
>Der nï¿½chste Schritt wï¿½re jetzt eine 90 Grad Drehung der Antenne, was in
>Anbetracht der
>gegebenen Verhï¿½ltnisse recht aufwendig aber machbar wï¿½re.
>Hat jmd. Erfahrung und kann sagen, ob das etwas bringen kï¿½nnte oder ist
>das bei UKW mit
>der Polarisation nicht so heikel?
>Robert
>
>

1135. Re: Project Skywire: Preliminary Report = WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 03:06:51 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39A885CB.D0405C42@roadrunner.nf.net>
Source record: 181747

> I've definitely identified a major source of RFI:
> It's 1310 WDCT, a all Korean AM BC station. It's small,
> only 5Kw I think. But it's offices are only a mile from my
> house, though I haven't spotted a tower as yet. I can
> definitely hear harmonics spilling over at least from
> 200 Khz approx. up into the 160M band. Awful!!
>
> Andrew
> KG4JBM

If it's not 'harmonics' in the true sense i.e. First = 1310, Second = 2620, Third = 3930 etc. it may be due to the strength and proximity of the 1310 signal.
Harmonics are not unheard of though. We used to have significant second harmonic of an 800 kilohertz station; so strong that you could listen to the the program on 1600 kilohertz. Was definitely a harmonic though cos. was the same on all different receivers.
I s'pose your 1310 transmitter could be anywhere? Not necessarily near the radio station offices? Could be on a hill or a high building!
If a strong signal gets into front end of receiver it can mix up with all sorts of other stuff including the signals you 'want' to receive! The unwanted signal could be so strong that it's overloading and like making the front end of the receiver act like a mixer. Or the 1310 may be getting further into the receiver?
As mentioned an attenuator or maybe a trap circuit tuned to reject the 1310 signal in front of the receiver might help?
Doing a little calculating; and assuming your receiver has a first IF of 455 Khz. you may get 'image' reception of what appears to be the 1310 signal at, 400, 1710 (second harmonic), etc. Yours doesn't sound as though it is an image problem.
Another long shot; the 1310 could be mixing (inter modulating) with some other local strong signal outside your receiver. Not common though.
Good Luck.

1136. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 03:12:54 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39A88735.454ABF41@roadrunner.nf.net>
Source record: 181748

> :That being the case, I believe I owe you an apology. There are alot of aliases
> :floating around the NG right now, and I think I somehow mixed you up with one
> :of them. It was my mistake, and I regret the error.
> :
> :Hope you find some useful answers on here, and I'll take a closer look at your
> :posts to see if there's anything I can contribute (if not, I'll stay out of the
> :way). Certainly my previous post was not constructive. With apologies--
> :
> :Rick K1BQT

Very nicely and gracefully said; if I may so comment. .

1137. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 04:03:27 UTC
From: Norman Litsche <nlitsche@worldnet.att.net>
Message-ID: <jq0q5.5358$Q36.381674@bgtnsc07-news.ops.worldnet.att.net>
Source record: 181749

Arrow146 wrote in message <20000826172852.15228.00000100@ng-mf1.aol.com>...
>>Subject: why do pagers emit radio frequencies?
>>From: "Dan Jacobson" jidanni@kimo.FiXcomTHiS.tw
>>Date: Sat, Aug 26, 2000 8:46 AM
>>Message-id: <8o8s3f$rkm@netnews.hinet.net>
>>
>>Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
>>walkman listening to an AM station gets close to it, I hear a
>>OoooOoooOoooOooo sound, indication that it is somehow putting out radio
>>signals. I thought pagers, like walkmans, just received signals, not
>>emitting...
>
>Most receivers also transmit.
>
>Ever use a scanner for a signal source ?
>It can give a full scale reading on your HT over
>a half block away.
>Works good for testing antennas.

Also good for finding the scanner, if you're so inclined...

de Norm, KA2TYT
>
>73 Al Lowe N0IMW
>Arrow Antenna

1138. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 04:50:15 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39A89C45.DBF50D36@home.com>
Source record: 181750
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Dan Jacobson wrote:
>
> Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
> walkman listening to an AM station gets close to it, I hear a
> OoooOoooOoooOooo sound, indication that it is somehow putting out radio
> signals. I thought pagers, like walkmans, just received signals, not
> emitting... Would a pager then be supposedly more worrisome healthwise
> than a walkman when close to the body all day? But if I were to put it in
> my backpack to be away from the body, I could not be alerted in noisy
> environments or at meetings, both of which I use the vibration alert
> selection for.

You are immersed in a sea of RF from ELF to cosmic rays from birth.
We have evolved in it from the beginning. Don't sweat it. Also don't
stare into radar transmitters.

Pagers contain crystal oscillators and down-counters to beat
incoming RF signals against so you can get your messages. Very tiny RF
levels. Chances are the Walkman spills more EM than the pager does. It
has bigger battery capacity and can afford to waste the power.
Different frequencies, but still...

Cellphones (while not transmiting) do the same thing, but most of
the RF is from the countdown circuits driving the clock function.

Do you have a watch with an EL backlight (Indiglo, etc.)? Hit the
backlight button and put the watch next to your Walkman. Kewl.

Mark L. Fergerson

1139. Re: inverted vertical dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 05:41:54 UTC
From: sideband@cac.net
Message-ID: <39a8a970.200898583@news.cac.net>
Source record: 181751

Terry:

Thanks for reminding me....

Rick has definately proven himself to be a worthwhile person to
associate with. It takes a big person to admit when they are wrong,
and an even bigger one to apologise with such grace.

I should have done it in my last post, and I regret that I did not, so
I shall do it here.

Rick, I applaud your strength of character.

-SSB
http://phoenixrising.cac.net

On or about Sun, 27 Aug 2000 00:42:54 -0230, Terry Sanford
<tsanford@roadrunner.nf.net>, using the forum
rec.radio.amateur.antenna did say:

:> :That being the case, I believe I owe you an apology. There are alot of aliases
:> :floating around the NG right now, and I think I somehow mixed you up with one
:> :of them. It was my mistake, and I regret the error.
:> :
:> :Hope you find some useful answers on here, and I'll take a closer look at your
:> :posts to see if there's anything I can contribute (if not, I'll stay out of the
:> :way). Certainly my previous post was not constructive. With apologies--
:> :
:> :Rick K1BQT
:
:Very nicely and gracefully said; if I may so comment. .
:

1140. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-27 23:07:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8oc6up$35p$2@plutonium.btinternet.com>
Source record: 181708

There's no noticeable difference between any of them. Just
put up the most simple and least expensive - a quarterwave
vertical and be done with it.

Reg
---
http://www.btinternet.com/~g4fgq.regp

Cory Papenfuss <papenfus@juneau.ece.uiuc.edu> wrote in
message news:OXbq5.2314$9N1.39397@vixen.cso.uiuc.edu...
> I was just wondering if the large base-loading coil flavor
of the
> 10-11M antenna (with the 4-10" diameter 5-10 coil free-air
loading coil)
> is better than the continuously-loaded 5/8 wave fiberglass
type.
>
> Thanks,
> -Cory
>
> --
>

1141. Re: Anyone using Strand Vise for tower guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8of125$lb1$1@bob.news.rcn.net>
Source record: 181519

Are we confusing two different items here?

These are not "wrapped" around the guywire end--I think I know what
you are talking about; and Texas Tower carries them.

.
The strand vices are comprised of a stainless steel U loop, machined
aluminum holder, and a bullet shaped device that the guy wire
is run through. The internal mechanism is like a Chinese finger lock;
but the cable can be released with a flat-blade screwdriver by relieving the
spring tension on the cable locking mechanism. They come in
two different styles, one for insulators and one for rod eyes. Virtually
every backguyed telephone pole I have seen uses the Strand Vice device
at the guy rod. Reuse is not an issue, since the guys will have turnbuckles
that can be
undone when needed. They do not appear to be suitable (due to the shape of
stainless steel U loops) for other than insulator or guy rod eye
terminations. I am not
sure they would mate properly with thimbles.

Peter

Oh Yeah! <maps75@pvtnetworks.net> wrote in message
news:sqlvpom7t91114@corp.supernews.com...
> Peter:
>
> There is good reason that you don't see them used
> on towers to a
> extent. That being that they are good for one
> wrap-up when you
> undo them the "grit" that holds the galvanized
> stranded guy wire for
> utility pole use is gone; get another guy wrap.
> Now they could be used
> quite successfully on guys where you put strain
> insulators, but down
> at the bottom where you might be re-tensioning the
> cable, go for
> thimbles and cable clamps. Al Piper; Central
> Valley Electric Co-op
> Inc. Just a chicken bander, but with two towers on
> his place.
>
> "Peter Bertini" <commquart@erols.com> wrote in
> message news:8oerq4$f7n$1@bob.news.rcn.net...

> > I have a source for Strand Vice and telephone
> style guy rods with mushroom
> > caps.
> >
> > Has anyone used or have heard any pros or cons
> regarding the use of Strand
> > Vices in
> > lieu of cable clamps to terminate the ends of
> the guy wires? It seem
> > strange I don't see
> > these products being used on towers--just
> utility poles. Any reason for
> > this? I am
> > considering using the Strand Vices on my new
> Rohn 25G foldover tower next
> > year.
> >
> > Peter
> >
> >
> >
>
>

1142. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39AB0B6A.F1C3B4CF@usa.alcatel.com>
Source record: 181520

Tom,

Can you give an order-of-magnitude estimate of the radiator size increase
needed to restore the capacatively loaded, folded monopoles efficiency? Can't
be worse than a tubing loop the same area, no?

Cortland
(ka5s@saber.net)

PS: Sent you a .jpg of one of my Bugcatcher experiments mounted.

Tom W8JI wrote:

> The differential mode impedance is inductive, and the hairpin monopole
> can be matched with capacitors, but it is NOT more efficient than a
> conventional monopole of the same height. As a matter of fact, it is
> less efficient unless great care is taken to minimize conductor
> resistance in the antenna.
>
> The reason for the lack of effficiency is the hairpin monopole (an
> electrically short folded monopole) has high circulating currents that
> involve the entire radiator. The VAR power is very high, worse than in
> a conventional inductor loaded antenna.
>
> So while you decrease loss in the loading inductance by "removing it"
> and using a higher Q lower ESR capacitor, you add a new loss mechanism
> that involves even more conductor resistance and even higher
> circulating currents.
>
> The only real advantage of a hairpin monopole is it allows two
> capacitors to be adjusted to move the antenna over a very wide
> frequency range. If large diameter high conductivity conductors are
> used in conjunction with vacuum capacitors, efficiency becomes about
> the same as a base loaded system.
>
> >Capacitors generally have lower loss than inductors when used to match
> >an electrically short antenna.
> >The impedance transformation obtained by using the folded system also
> >reduces the losses in the antenna tuning unit.
> >Finally, the fold wires form a cage around the mast, which results in an
> >increase in effective radiator diameter.
> >The result is a wider operational bandwidth.
>
> The hairpin monopole has very restricted BW on frequencies where the
> radiator is a small fraction of a wavelength long. That is because VAR
> power is so high. Matching losses are less, if you don't consider

> circulating currents in the antenna part of "matching losses". If you
> do consider I^2 R conductor losses in the antenna as matching losses
> (they are certainly real losses) then you have to consider them
> antenna losses.
>
> On 3 MHz, some military hairpin monopoles are made from brass so they
> are "de-Qed" enough to handle a SSB voice channel!
>
> 73 Tom

1143. Re: Anyone using Strand Vise for tower guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Frank Donovan <donovanf@erols.com>
Message-ID: <8of9hkrgg1@bob.news.rcn.net>
Source record: 181521

Roger,
I'm still using many strand vises that I installed on
1/4" EHS guy wire over 25 years ago. I've never
experienced a failure and they still appear to be
in excellent condition. I'd still be using all of them today;
however, I replaced most of my steel guys with 3/8"
fiberglas rod five years ago.

More recently I've been using Big Grips, which are more
readily available in the ham marketplace, and -- like
strand vises -- very easy to install.

73
Frank
W3LPL
donovanf@erols.com

Roger Halstead <rdhalste@tm.net> wrote in message
news:cBFq5.986$dD4.79361@monger.newsread.com...
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Peter Bertini" <commquart@erols.com> wrote in message
> news:8of125$lb1$1@bob.news.rcn.net...
> > Are we confusing two different items here?
> >
> > These are not "wrapped" around the guywire end--I think I know what
> > you are talking about; and Texas Tower carries them.
>
> Those would be the "big grip"? ends used with Phillistrand cable.
> I use them and they are great, but you have to consider them disposable.
> You can redo one of them twice, but not if they've been on for more than
two
> weeks.
>
> With steel cable, I use the "wrap" method instead of clamps.
> Again, the end becomes un-reuseable.
>
> I've not used the ones you are talking about.
>
> Roger (K8RI)
> >
> > .
> > The strand vices are comprised of a stainless steel U loop, machined
> > aluminum holder, and a bullet shaped device that the guy wire

> > is run through. The internal mechanism is like a Chinese finger lock;
> > but the cable can be released with a flat-blade screwdriver by relieving
> the
> > spring tension on the cable locking mechanism. They come in
> > two different styles, one for insulators and one for rod eyes.
Virtually
> > every backguyed telephone pole I have seen uses the Strand Vice device
> > at the guy rod. Reuse is not an issue, since the guys will have
> turnbuckles
> > that can be
> > undone when needed. They do not appear to be suitable (due to the shape
> of
> > stainless steel U loops) for other than insulator or guy rod eye
> > terminations. I am not
> > sure they would mate properly with thimbles.
> >
> >
> > Peter
> >
> >
> >
> > Oh Yeah! <maps75@pvtnetworks.net> wrote in message
> > news:sqlvpom7t91114@corp.supernews.com...
> > > Peter:
> > >
> > > There is good reason that you don't see them used
> > > on towers to a
> > > extent. That being that they are good for one
> > > wrap-up when you
> > > undo them the "grit" that holds the galvanized
> > > stranded guy wire for
> > > utility pole use is gone; get another guy wrap.
> > > Now they could be used
> > > quite successfully on guys where you put strain
> > > insulators, but down
> > > at the bottom where you might be re-tensioning the
> > > cable, go for
> > > thimbles and cable clamps. Al Piper; Central
> > > Valley Electric Co-op
> > > Inc. Just a chicken bander, but with two towers on
> > > his place.
> > >
> > > "Peter Bertini" <commquart@erols.com> wrote in
> > > message news:8oerq4$f7n$1@bob.news.rcn.net...
> > > > I have a source for Strand Vice and telephone
> > > style guy rods with mushroom
> > > > caps.
> > > >
> > > > Has anyone used or have heard any pros or cons
> > > regarding the use of Strand

> > > > Vices in
> > > > lieu of cable clamps to terminate the ends of
> > > the guy wires? It seem
> > > > strange I don't see
> > > > these products being used on towers--just
> > > utility poles. Any reason for
> > > > this? I am
> > > > considering using the Strand Vices on my new
> > > Rohn 25G foldover tower next
> > > > year.
> > > >
> > > > Peter
> > > >
> > > >
> > > >
> > >
> > >
> >
> >
> >
> >
>
>

1144. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8ofaumscp1@slb6.atl.mindspring.net>
Source record: 181522

Roy:

I, like you, consider email addressed to me as private correspondence, just as I would a private letter or telephone conversation, and will never "publish" such communications.

In fact it is usual in bibliographic work to ask permission of the author of such correspondence before revealing even it's subject matter and then only with an acknowledgement.

Clearly, as we have observed many times on this NG, the NG posters at the "Fractenna" address, do not seem to follow the "norms" of any form of human communications. They apparently have their own rules of behavior in this regard and care little or nothing for the habits and behavior of "conventional" society in this regard. Bohemians perhaps, or...

And so... advice to those who would communicate with Fractenna, should be to do so only with restraint and caution.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Roy Lewallen <w7el@eznec.com> wrote in message
news:39A9CBB3.21EB0894@eznec.com...
> Gerald Schmitt wrote:
> >
> > I have to agree with you Fracadolf reposted my email also
> > apparently the rules of good conduct and gentlemanly behavior
> > simply don't apply to Nathan the twirp.
> >. . .
>
> I've always considered all email to be private and confidential unless
> the sender specifically gives me permission to reveal it, and feel that
> this is simply common courtesy and considerations for others. I always
> have, and always will, adhere to this standard, as I believe most others
> do. But I've come to find out that other standards prevail. Chip has
> stated quite a number of times that he considers it acceptable to
> publicly post the contents of any email not specifically marked
> "private" or "confidential", and has posted a number of email messages
> sent to him. Regular readers of this newsgroup should be aware of his
> policy, but newcomers are blindsided from time to time. Does anyone know
> if this is a general practice, or if it is, as I hope, unusual?
>

> Roy Lewallen, W7EL

1145. Re: wanted schematic turnstile antenna for 137 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39AB323F.596E@wt.net>
Source record: 181523

Antoon Milatz wrote:
>
> Looking for schematic/mechanical layout etc for turnstile antenne for
> receiving 137 MHz wx satellites.
> Any hints/links/info appreciated.
>
> Antoon (pa3bwe@amsat.org)

There should be one in the ARRL ant handbook. Just crossed dipoles with
a 90 degree phase difference between the two. For what you want to do,
you might also look into a ground screen to have below the turnstile. MK
--
http://web.wt.net/~nm5k

1146. Re: Texas Bug Catchers --- Any Recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AB2E98.C420650@oio.net>
Source record: 181524

Tony Hackenberg wrote:
>
> I'm thinking about purchasing a "Texas BugCatcher" antenna from GLA Systems
> for mobile work. Yet, I have not heard much discussion about them in this
> newsgroup. Any recommendations or advice on BugCatchers?
>
> Since you can mix & match the basic components of a BugCatcher antenna,
> GLA's order form and web page (http://www.texasbugcatcher.com) are
> complicated. Adding to the complexity, many of the components come in
> differing sizes to better tailor them to your needs. I'm planning on using
> the BugCatcher on my Ford F-250 (1989) truck. I want to work 80-10 meters
> mobile. I've scoped out the following tentative list of components for the
> BugCatcher antenna:
>
> Model - GLA Systems' Texas BugCatcher Antenna (non-remote tune; not
> motorized)
> Mount - "Fold-over Trailer Hitch Mount" ($95)
> Quick-Disconnects - QOL (Long Base Screw-Off) ($32)
> Matching Coil - HD80 ($35)
> Mast - 5' ($38)
> Quick-Disconnects - QOM (Short Base Screw Off) ($30)
> Loading Coil - #480 Coil ($139)
> Extender Mast - Short Mast before Hat ($?)
> Capacity Hat - 6 inch diameter ($20)
> Quick-Disconnects - QOS (Small Screw-Off for Whip) ($20)
> Whip - 72" (6' - 3/16" x 102") ($18)
> Extra Coil Tap Kit - Spare coil taps etc ($12)
>
> Tony Hackenberg WA8SSQ

Tony,
'BugCatchers' work very well, and on the lower HF bands, is
probably
the 'best' mobile antennas. Having used a number of different mobile
antennas, I think the 'BugCatcher' does better than the rest (on 80m).
You don't need all the things you listed to mount a 'BugCatcher'.
A
bottom mast that will get the coil at or near cab height, the coil of
your choice, a cap-hat, and then the whip.
The choices of coil, size of cap-hat, and the length of the whip
are
up to you. The '480' coil, an 18" cap-hat, and about a 5-7 foot whip
will work fine on 80 meters. It may not work too well on 10 meters
though (too long). The impedance matching coil is also very nice to

use. If the quick disconnect is the large brass one, it works okay
too.
A short mast between coil and cap-hat isn't necessary. The quick-
disconnect between coil and whip isn't really necessary, but might be
nice to have. Just be sure to check it often.
I don't use the tap-kit, I use an aligator clip instead. (That's
just
personal preference though. I mark the coil, and can move anywhere
without
worrying about having a tap there.)
If your buying from Henry Allen, ask his advice, he's happy to talk
about it, and won't 'skin' you.
'Doc

1147. Re: You Might Be a Redneck if.....Was: You Know You Are----------

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <0pFq5.16415$OG.457325@nntp0.chicago.il.ameritech.net>
Source record: 181525

Sheesh, thank GOD my ATAS-100 takes up all four, elsewise..... Oh I would hate to think.

Kent, K9EZ

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message news:39A95540.2229@bellsouth.net...
> And you might be a Redneck if.....
>
> Your mobile has more antennas in the air than wheels on the ground! LOL!

1148. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39AB5AA0.F19A1540@haertig.com>
Source record: 181526

Peter Murtha wrote:
>
>
> Perhaps one of the greatest advantages of the folded system is that it
> allows use of an existing grounded tower structure, and simplifies the
> connections to other antennas or lights mounted on the tower.
> 73 Peter.
>

This is the greatest advantage - and perhaps the only real advantage.

The improvement in efficiency achieved by using a capacitor instead of an inductor as the matching element is probably unmeasurable using the quality of inductors found in most broadcast ATU's. These inductors typically have a Q in excess of 300. The exception to this might be towers with particularly low base impedances (<10 ohms).

Additionally, in most folded monopoles of reasonable size, you can't find a shorting point that will give you 50 +jXXX, so you are usually stuck using a T or L network anyway.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1149. Re: Homebrew Helical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Malcolm Austin <Malcolm@g3rem.freeserve.co.uk>
Message-ID: <8ofumtdpr1@news6.svr.pol.co.uk>
Source record: 181527

Harry,
Reg Edwards who you will find on this group has a free DOS prog'
which will help you
calculate the sizes of an helical antenna. I've been playing with it for a
160m mobile antenna, and
it does give some very interesting results!

His web page is on,

http://www.btinternet.com/~g4fgq.regp

Regards, Malcolm...

Harry Stone <ke6tcg@juno.com> wrote in message
news:39a7fbc1_5@news.newsfeeds.com...
> Can someone please direct me to information about helical antennas. I am
> interested in building a few jus to see what happens.
> Tnx
> 73
> Harry
> ke6tcg
>
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1150. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Scott Schultz <n0iu@arrl.net>
Message-ID: <N7oq5.101207$QD5.1020775@news.corecomm.net>
Source record: 181620

I use the Hustler 75 meter Super Resonator. Narrow bandwidth, but get 5x9's
all the time!
73,
de Scott N0IU

"rsm" <rsm@magpage.com> wrote in message news:8obtf9sak0@216.155.62.87...
> Does anything really work very well?

1151. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: VK2KCE <hrbe@dingoblue.net.au>
Message-ID: <39aa11be$0$774$7f31c96c@news01.syd.optusnet.com.au>
Source record: 181621

Hello,
Some years back I had a QSO with an amateur radio operator, he had a 1/2 wavelength dipole strung along the length of his giant rig!!!

To explain,

Outback in Australia, "road trains" are allowed to run, that is 2 or 3 full sized semi trailers each 42 feet long and all hooked together.

His signal was superb, seeing he was mobile!!!

I used to be mobile on 75/80m for up to 16 hours a day when I was a "truckie", so I was very envious as I had only one trailer in my rig, and had to make do with a helically wound whip...

John McLean
VK2KCE
Australia

"rsm" <rsm@magpage.com> wrote in message news:8obtf9sak0@216.155.62.87...
> Does anything really work very well?

1152. Re: Four Up, Four Down

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Cortland Richmond <ka5s@saber.net>
Message-ID: <39AA1CBD.C14C4098@saber.net>
Source record: 181622

There IS a civilian version; what you have is called a biconical dipole. It's not much used for communications because civilians don't need the wide bandwidth of a conical antenna. One company (I think it's ARRA) sells a conical dipole that covers 50-1000 MHz with low SWR. It has two cones, each with six or eight elements, each five feet across and five feet long. However, I believe this is mainly used by government agencies in need of a good surveillance antenna. Shorter, less efficient versions of the biconical dipole are used for EMI testing. These show a fairly low SWR from about 70 or 80 MHz through 200 to 300 MHz.

FWIW, your antenna probably works better than the 292 did. And you don't have to take it down when your net changes frequency. Plus you can use a FH rig with it. Anti-jam is nice to have!

Cortland
(ka5s@saber.net)
(SFC, USA, Retired)

Brian Haren wrote:

> Got an antenna question that's been rattling around in my (admittedly mostly
> empty) mind for a while now...
>
> I'm in the Army and spend a lot of time in the field, much of it
> communicating over various FM radios. The standard Army FM "base station"
> antenna is the OE 524 (the successor to the 292 to you old timers out
> there). This antenna has 8 elements, four pointing up in a "crown" pattern
> angled about 70 degrees from the hoizontal, four pointing down in the same
> approximate pattern. The four pointing up are, I assume, the driven
> elements, the four pointing down are the ground plane elements. The Army is
> obviously in love with this antenna; as far as I can tell it's been in use
> since the '60's. However, I have never seen this antenna duplicated in a
> civilian form. That would tell me that it's not as good a performer as it's
> military popularity would seem to indicate.
>
> Can anyone tell me what the theoretical performance of this antenna
> arrangement is and why it's so popular with the military and not the
> civilian market?
>
> 73!
> Brian
> KC5YNP

1153. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aa1fbe.1235115@news.akorn.net>
Source record: 181623

Hi Courtland,

On Sun, 27 Aug 2000 18:27:28 -0700, Cortland Richmond <ka5s@saber.net>
wrote:

>For 80 and 160, I've found a shorter antenna, mounted on the roof, works
>better than a longer one with the same tip height, frame mounted.

No disagreement there.

>I've seen
>this ascribed to concentration of ground current near the feed point, which
>does sound logical.

Actually the ground lkoss resistance is almost identical on 160 meters
or 80 meters, because the counterpoise is so small and bulky there
isn't any "room" for major improvements in current distribution.

The vehicle doesn't radiate much on those low frequencies.

>area of asphalt or concrete roadway. Also, avoiding vertical parts of the
>car does reduce cancellation of radiation by nearby opposing currents.

That is part of the answer. The other part is you don't have the high
voltage area of the antenna next to the sheet metal, where the
capcitance effectively "short circuits" the antenna and prevents the
upper part from contributing as much to radiation.

73 Tom

1154. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aa2130.1605219@news.akorn.net>
Source record: 181624

On Mon, 28 Aug 2000 02:05:15 -0500, "Scott Schultz" <n0iu@arrl.net>
wrote:

>I use the Hustler 75 meter Super Resonator. Narrow bandwidth, but get 5x9's
>all the time!
>73,
>de Scott N0IU

The Hustler is OK, but it isn't high efficiency by any means. Bug
catcher or aixdux/miniductor type coils have much less loss.

Bandwidth has little to do with efficiency in a mobile antenna.
Bandwidth is mostly a function of reactance needed to resonant the
antenna, rather than resistive losses. It's common folklore than
narrow banded antennas are efficient, but it is generally untrue.

73 Tom

1155. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AA24F0.3F48C476@eznec.com>
Source record: 181625

Tom W8JI wrote:

> . . .

> Actually the ground lkoss resistance is almost identical on 160 meters
> or 80 meters, because the counterpoise is so small and bulky there
> isn't any "room" for major improvements in current distribution.
>
> The vehicle doesn't radiate much on those low frequencies.

>. . .

That surprises me. If an antenna is mounted at the center of the roof of a five-foot high vehicle, I'd expect the vehicle to be essentially a five-foot high radiator. (Horizontal components would cancel out due to symmetry.) Because of the capacitance to ground, it should have nearly constant current on it, which would make it radiate as much as a five foot high top loaded whip. That would have it producing a field which is only 3 dB down from the field from a 10 foot high top loaded whip. Or is something wrong with my assumptions?

Roy Lewallen, W7EL

1156. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aa2251.1894519@news.akorn.net>
Source record: 181626

On Sun, 27 Aug 2000 19:17:23 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>do. But I've come to find out that other standards prevail. Chip has
>stated quite a number of times that he considers it acceptable to
>publicly post the contents of any email not specifically marked
>"private" or "confidential", and has posted a number of email messages
>sent to him. Regular readers of this newsgroup should be aware of his
>policy, but newcomers are blindsided from time to time. Does anyone know
>if this is a general practice, or if it is, as I hope, unusual?
>Roy Lewallen, W7EL

There are multiple sources for good internet behavior. All of the FAQ
lists on email I can find considered it "bad form" or bad behavior
to repost e-mail in public without permission of the source.

I think it's a matter of how fair and honest the person is.

73 Tom

1157. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: dcckc@my-deja.com
Message-ID: <8oddu5nfu1@nnrp1.deja.com>
Source record: 181627
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

I think my Elmer just turned over in his grave. I presume you don't own a toaster for same reason In article <8nmkaeagq1@nnrp1.deja.com>, jason_hsu@my-deja.com wrote:

> Has anyone here homebrewed a SIMPLE loop antenna? I have read a few
> articles on the ARRL site on loop antenna projects. The loop antennas
> seem to offer decent performance for an apartment, and the fact that
> loop antennas are balanced eliminates the need for an RF ground.
>
> I should note that I don't want to buy a soldering iron (due to the
> fact it is a fire hazard and I don't have a workshop), drill, hacksaw,
> or other dangerous equipment. Also, I have NO experience in
> homebrewing amateur radio equipment. Can I build a loop antenna using
> just simple tools like a screwdriver, hammer, and socket wrenches?
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1158. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39AA2F5A.5BC0A941@dialpoint.net>
Source record: 181628

YOu might try making an antenna and seeing how that works. Doesn't usually take much for the repeaters from your house. Just use a good grade of coax to feed it with. Atleast rg-8 or maybe the 9913 type.

If you wan tto buy one, there have been some on e-bay that resemble the Diamond or Comet antennas for less. The Diamond or Comet antennas seem to work fine. I would probably stay with the cheaper modles and not the higher gain ones as you will not really see that much. The gain numbers on antennas that you see seem to be just made up and not a real world number. I think they are refferenced to a handy talkey antenna as it would take one about 20 feet long to get 6 db over a dipole.
Stay away from the Cushcraft Ringo typw of antennas.

73 de ku4pt

KG4FGN wrote:
>
> Sorry, guess I should have made it clear. In the car I have a mag mount
> antenna. What I was looking for was something to use at the house, to mount
> up high.
>
>

1159. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000828071036.16905.00000175@ng-cu1.aol.com>
Source record: 181629

I see the mischief is up to 3rd gear again. Thus I am happy to reprint the post, which clearly and decisively presents the issues and the facts. If the incorrect and maligning discussion continues I will repeat as needed as a general courtesy.

With best regards,

Chip N1IR

----------------=----------
Wayne Grauel said:

>I really don't get it. What is all this Fractenna stuff about. I've
>been watching this news group for a while trying to learn a few things
>from people's input on antennas, and all I read is this stuff (could
>have used a more aromatic word here to describe it) about Fractenna,
>lawsuits, patents, and God knows what. Why don't you all just ignore
>him. All you're doing is feeding him (or them... I haven't really
>figured it out) with a reason to argue and a whole string a subsequent
>replies and more name-calling and bitching...
>
>This seems like poison ivy, scratch it and it still itches but spreads
>like crazy, ignore it and soon enough it will go away... hopefully.
>

This is a clear cut case of harassment and libel. I am particularly disturbed by this effort to embarrass me publicly, while, via e-mail and after this post, Wayne gives the contradictory effort to interact with me and, indeed, state positive statements. In other words, the NG creates and environment where people say exactly the opposite of what their actions pose.

I am posting an UNSOLICITED e-mail exchange, done without any effort to state the e-mail was confidential or private, from Wayne at the wggvideo@attglobal.net:

<<Chip, went throught your site last night and it's really quite inpressive. It's
quite way above my head, in fact I have read some of the disscussions on the anntenna NG (general questions form others, not the sitr your antennas seem to bring up) and I'ts really amazing to hear the depth engeneering some of those guys are into...."

I replied:

"Wayne. I'm sorry but I don't feel comfortable with friendly e-mail banter, given your hostile and denigrating public comments on the NG.

Realize that the NG is not a bulletin board, and is read and accessible globally and in an archived fashion. Such comments are painful to me personally and have measurable negative impact on my efforts--both scientific and in providing for my family.

Kindly do not e-mail any more.

I do respond, as do others, on the fractal antenna reflector to fractal antenna questions.

Cordially,

Chip"

I will not be a public focus for harassment and abuse.

I will continue to encourage hams to understand and pursue fractal antennas, and will answer them in an objective and cordial public forum: the fractal antenna reflector--

fractalantenna-subscribe@egroups.com

In any case, maintaining a hostile environment so that people do NOT want to say positive things on this NG--and have to do it as e-mail-- is surely the death of this community.

73
Chip N1IR

_____

1160. Looking for Don Johnson W6AAQ

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <rcgkqs846cfijaga92lvb5tp89pt3oj61e@4ax.com>
Source record: 181630

I am trying to get in touch with Don Johnson W6AAQ to find out more
about his Screwdriver antennas but all I can find on the net is a
collection of web pages with bouncing E-mail addresses, Does anyone
have contact details for him and is he still making screwdriver
antennas?
thanks.

Brendan Minish EI6IZ.
--
Brendan Minish
The reply address works but
This will get to me faster
bminish at eircom dot net

1161. Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Jesper Wolf Jespersen <jwj@ehuset.com>
Message-ID: <s1sq5.117$HA2.2548@news.get2net.dk>
Source record: 181631

Hello there.

I went and built me a new antenna this weekend.

Its not exactly a fancy antenna, a two legged dipole for 40, 20 and 15 metres.

The Wire I used was 1.3 mm steel wire with transparant plastic coating, this was selected for strength since the antenna carries it self, the balun and feedline and thus needs to be pretty taught.

The dipoles are terminated in antenna eggs (porcelain insulators) and tied to 5 mm flagline (synthetic).

The end points are two trees at the back of the garden, in aproximately 4 metres height and two antenna posts on the roof of our house in about 8 metres height. All antenna endpoints are at least 2 metres from any "ground" potential and they are hanging free.

The two legs ended up being 4.755 m for the 20 metres band and 9.84 m for the 40 metres band, they are space aprox 45 degrees horisontally. (Looks like a giant spider had started a web over the garden :-)

The VSWR on 40 is below 1.6 at the resonance point 7.075 MHz, on 20 m the VSWR is below 1.8 at the resonance point of 14.200 MHz.

But the antenna does not have a resonanse on 15 m and the VSWR here is above 2 all the way, falling a bit towards the higher frequencies.

I dont realy understand this, I would have expected a clear ressonance at 21.230.
Likewise I would have expected the VSWR's to be lower. (1.2-1.5)

Previously I had two dipoles up using copper cable, 1.5 square mm strength, for the 40 and 10 metres bands. Placed at exactly the same position as the two I have now.
The 40 metres dipole using copper cable was aproximately 20 cm longer with the same ressonance frequency as the steel wire, and I had a nice VSWR below 1.6 on 15 metres.

The reason I changed the setup was that the antenna didnt work to well in wet conditions, the synthetic line was simply a signal drain when wet and since the antennawire was just piggybacked on the flagline there was no way to isolate them.

I changed the 10 Metres dipole to a 20 Metres dipole simply because I had more traffic there.

Now I am a bit baffled because I cannot get the calculations to match this antenna.

Normally the length of an antenna is given by the formula :
L = 0.95*(300 / F0)/4

L : quarter wavelength
0.95 : light speed reduction in antenna material
300 : Speed of light (million kilometres pr second)
F0 : Centre Frequency in MHz

The lengths of the two dipole legs would have been 10.07 m and 5.02 m if this equation was exact.
It seems the speed reduction factor is larger for steel wire, but the two legs indicate different reduction factors:
0.93 at 7 MHz and 0.90 at 14 MHz.

This does not seem resonable, the steel wire is not as good a conductor as copper but I would expect the speed reduction factor to be constant.

Have I been dumb in selecting this antenna material ?

I have tried to check for errors, have checked that the legs are symetric and even cut a few branches of a plumb tree that came close to the antenna. But I have no explanation for the phenomenon.

The antenna Works, I have had DX contacts on both 40m and 20m, but I cannot compare to my old setup. The conditions on 20 have been poor over the weekend so I cannot say if the antenna is worse than before.

Does any of you have helpfull comments ?

I think it is fun experimenting with antennas, but I like to see progress or at least a good explanation to why I had a setback.

Greetings from Denmark

Jesper Wolf Jespersen

1162. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <bvjkqs8256g9j8qbv5ogj3i5b054hvpul8@4ax.com>
Source record: 181632

Um, Chip, Methinks your skin be too thin.

He did say "seems", which, to most people, indicates a personal opinion or viewpoint is being expressed. He didn't say "is", which would be a statement of fact. As I see it, his comment was not directed at you personally, nor does it seem to have been phrased to denigrate, degrade, slander, libel, or otherwise harm you, your business, or your family's supper.

Please note: THE FOLLOWING IS MY PERSONAL VIEW ON THIS SUBJECT, and is not a statement of fact. It seems to me, reading your responses to other posts, most oft taken out of context, that you have been baiting the readers of this news group in order to foster a "poor me" feeling amongst the netizens herein, thereby passively marketing your antenna(e) passively to those susceptible to the "sympathy purchase".

This, I feel, is why some have outwardly criticized your posts, and have gone as far as to assume everything posted by "somename"@aol.com, who has never appeared anywhere in any news group (nor anywhere since then) has been an "alternate personality" of yours, to foster some support for your particular ideas and potential products.

Then again, their outward objections to this perceived tactic has enabled you, in my view, to continue garnering sympathy ("poor me, buy my antennae") by posting messages alluding to lawsuits, etc, which prompts more outward objections, which prompts you to post some more about lawsuits, ad infinitum. It seems (there's that word again!) to be a never ending cycle, which resembles poison ivy (there's that metaphor again).

If we were ever given technical specifications about your antennae, where they would be best put to use, where their efficiency gain is seen, conditions under which another antenna would be a better choice, etc, I have never seen it. I have seen posts about web sites which provide vague data (at best), web sites showing patent applications which read like stereo instructions that were originally written in Swahili, translated to German, then Japanese, then finally English, and no other real data upon which I could base an opinion one way or the other on any fractal antenna design.

All I have been presented with is threads upon threads upon threads of people asking for information, you claiming it's an affront to your potential business prospects, and you threatening lawsuits, etc, against the netizens of this particular news group.

Would it be possible to end this chain of perceived abuse, statement
of opinion, threats, insults, and the like, and get some real data on
this subject so that we may make an intelligent, informed decision as
to the merits of such a technology, and where it would best be used?

Or are we to continue upon the present path, in which no one gets any
answers, and nothing is accomplished?

Just the two cents of a CB'er who hopes one day to become a HAM.

-SSB

On or about 28 Aug 2000 11:10:36 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:I see the mischief is up to 3rd gear again. Thus I am happy to reprint the
:post, which clearly and decisively presents the issues and the facts. If the
:incorrect and maligning discussion continues I will repeat as needed as a
:general courtesy.
:
:
:With best regards,
:
:Chip N1IR
:
:-----------------=-----------
:Wayne Grauel said:
:
:>I really don't get it. What is all this Fractenna stuff about. I've
:>been watching this news group for a while trying to learn a few things
:>from people's input on antennas, and all I read is this stuff (could
:>have used a more aromatic word here to describe it) about Fractenna,
:>lawsuits, patents, and God knows what. Why don't you all just ignore
:>him. All you're doing is feeding him (or them... I haven't really
:>figured it out) with a reason to argue and a whole string a subsequent
:>replies and more name-calling and bitching...
:>
:>This seems like poison ivy, scratch it and it still itches but spreads
:>like crazy, ignore it and soon enough it will go away... hopefully.
:>
:
:This is a clear cut case of harassment and libel. I am particularly disturbed
:by this effort to embarrass me publicly, while, via e-mail and after this post,
: Wayne gives the contradictory effort to interact with me and, indeed, state
:positive statements. In other words, the NG creates and environment where
:people say exactly the opposite of what their actions pose.
:
:I am posting an UNSOLICITED e-mail exchange, done without any effort to state
:the e-mail was confidential or private, from Wayne at the
:wggvideo@attglobal.net:
:
:<<Chip, went throught your site last night and it's really quite inpressive.
:It's

:quite way above my head, in fact I have read some of the disscussions on the
:anntenna NG (general questions form others, not the sitr your antennas seem to
:bring up) and I'ts really amazing to hear the depth engeneering some of those
:guys are into...."
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:I replied:
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:"Wayne. I'm sorry but I don't feel comfortable with friendly e-mail banter,
:given your hostile and denigrating public comments on the NG.
:
:Realize that the NG is not a bulletin board, and is read and accessible
:globally and in an archived fashion. Such comments are painful to me personally
:and have measurable negative impact on my efforts--both scientific and in
:providing for my family.
:
:Kindly do not e-mail any more.
:
:I do respond, as do others, on the fractal antenna reflector to fractal antenna
:questions.
:
:Cordially,
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:Chip"
:
:I will not be a public focus for harassment and abuse.
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:I will continue to encourage hams to understand and pursue fractal antennas,
:and will answer them in an objective and cordial public forum: the fractal
:antenna reflector--
:
:fractalantenna-subscribe@egroups.com
:
:In any case, maintaining a hostile environment so that people do NOT want to
:say positive things on this NG--and have to do it as e-mail-- is surely the
:death of this community.
:
:73
:Chip N1IR
:
:_____

1163. wanted schematic turnstile antenna for 137 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Antoon Milatz <antoon.milatz@tek.com>
Message-ID: <39AA5456.6C8A1DBE@tek.com>
Source record: 181633

Looking for schematic/mechanical layout etc for turnstile antenne for
receiving 137 MHz wx satellites.
Any hints/links/info appreciated.

Antoon (pa3bwe@amsat.org)

1164. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39AA5770.8F870A2E@attglobal.net>
Source record: 181634

Chip.... you say "This is a clear cut case of harassment and libel." How in the world did you ever make it through high school. Grow up!

End of discussion....
Wayne

Fractenna wrote:

> I see the mischief is up to 3rd gear again. Thus I am happy to reprint the
> post, which clearly and decisively presents the issues and the facts. If the
> incorrect and maligning discussion continues I will repeat as needed as a
> general courtesy.
>
> With best regards,
>
> Chip N1IR
>
> -----------------=-----------
> Wayne Grauel said:
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> >been watching this news group for a while trying to learn a few things
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> >have used a more aromatic word here to describe it) about Fractenna,
> >lawsuits, patents, and God knows what. Why don't you all just ignore
> >him. All you're doing is feeding him (or them... I haven't really
> >figured it out) with a reason to argue and a whole string a subsequent
> >replies and more name-calling and bitching...
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> bring up) and I'ts really amazing to hear the depth engeneering some of those
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> providing for my family.
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> Kindly do not e-mail any more.
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> I do respond, as do others, on the fractal antenna reflector to fractal antenna
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> Cordially,
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> I will continue to encourage hams to understand and pursue fractal antennas,
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> fractalantenna-subscribe@egroups.com
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> In any case, maintaining a hostile environment so that people do NOT want to
> say positive things on this NG--and have to do it as e-mail-- is surely the
> death of this community.
>
> 73
> Chip N1IR
>
> _____

1165. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <RMsq5.124893$c5.3010495@news2.rdc1.on.home.com>
Source record: 181635

Ralph Mowery <rmowery@dialpoint.net> wrote in message
news:39AA2F5A.5BC0A941@dialpoint.net...
> YOu might try making an antenna and seeing how that works. Doesn't
> usually take much for the repeaters from your house. Just use a good
> grade of coax to feed it with. Atleast rg-8 or maybe the 9913 type.
>
> If you wan tto buy one, there have been some on e-bay that resemble the
> Diamond or Comet antennas for less. The Diamond or Comet antennas seem
> to work fine. I would probably stay with the cheaper modles and not the
> higher gain ones as you will not really see that much. The gain numbers
> on antennas that you see seem to be just made up and not a real world
> number. I think they are refferenced to a handy talkey antenna as it
> would take one about 20 feet long to get 6 db over a dipole.
> Stay away from the Cushcraft Ringo typw of antennas.
>

I have had good luck with my Cushcraft AR2. Easy to tune, rugged, bought it
used for 25.00 CDN.

Barry D.

1166. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000828082102.20943.00000170@ng-cf1.aol.com>
Source record: 181636

>Chip.... you say "This is a clear cut case of harassment and libel." How in
>the
>world did you ever make it through high school. Grow up!
>
>End of discussion....
>Wayne
>
>Fractenna wrote:
>
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>> With best regards,
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>> >replies and more name-calling and bitching...
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>> It's
>> quite way above my head, in fact I have read some of the disscussions on
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>> Kindly do not e-mail any more.
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>> I do respond, as do others, on the fractal antenna reflector to fractal
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>> questions.
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>> Cordially,
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>> Chip"
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>> In any case, maintaining a hostile environment so that people do NOT want
>to
>> say positive things on this NG--and have to do it as e-mail-- is surely the
>> death of this community.

>>
>> 73
>> Chip N1IR
>>
>> ------------------------------
>
>

I do indeed Wayne. You should be ashamed.

NC

1167. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8odn9pbjr1@uranium.btinternet.com>
Source record: 181637

Below 10 MHz, an HF antenna mounted in the center of the roof of a small vehicle behaves as a short, 1/2-wave-resonant, roughly middle-loaded vertical, near the ground.

The lower portion has a large conductor diameter with the bottom end connected to mother earth via a calculable air-spaced capacitance. The ground, in effect, is a 'bottom' capacitance hat. The series loss resistance of the hat capacitance is also calculable when the soil resistivity is known. (But this need not take the fun out of shoot-outs.)

The large 'bottom' hat causes the current in the lower portion to be more uniformly distributed along its length rather than having a triangular distribution as in the top portion. So the resulting radiation resistance of the whole system may be roughly twice that assumed in ARRL bibles where only the length of the portion of the antenna above the roof is considered.

When the whip is mounted on the rear bumper the effective overall antenna length and radiation resistance are much the same as a shorter roof-mounted whip having the same overall height restriction. As pointed out elsewhere, this will be less efficient than roof mounting because the direct capacitance of whip-to-vehicle-body increases circulating current through the loading coil without contributing much to radiation. As ever, parasitic capacitance increases coil loss and decreases effective Q.

On the other hand, coil loss does not increase all THAT much because a smaller loading inductance is needed for the longer whip and coil loss resistance decreases in the same proportion. Taking economics into account, there's no need to depress the resale value of your Rolls by cutting a hole in the roof. Whatever would we do without our pocket calculators?

Deary me ! Life gets SOOoooo complicated in this 21st-century hi-tech age !

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Roy Lewallen <w7el@eznec.com> wrote in message
news:39AA24F0.3F48C476@eznec.com...
> Tom W8JI wrote:
>
> > . . .
>
> > Actually the ground lkoss resistance is almost identical
on 160 meters
> > or 80 meters, because the counterpoise is so small and
bulky there
> > isn't any "room" for major improvements in current
distribution.
> >
> > The vehicle doesn't radiate much on those low
frequencies.
>
> >. . .
>
> That surprises me. If an antenna is mounted at the center
of the roof of
> a five-foot high vehicle, I'd expect the vehicle to be
essentially a
> five-foot high radiator. (Horizontal components would
cancel out due to
> symmetry.) Because of the capacitance to ground, it should
have nearly
> constant current on it, which would make it radiate as
much as a five
> foot high top loaded whip. That would have it producing a
field which is
> only 3 dB down from the field from a 10 foot high top
loaded whip. Or is
> something wrong with my assumptions?
>
> Roy Lewallen, W7EL

1168. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aa6b74.20620018@news.akorn.net>
Source record: 181638

Hi Roy

On Mon, 28 Aug 2000 01:38:08 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>
>That surprises me. If an antenna is mounted at the center of the roof of
>a five-foot high vehicle, I'd expect the vehicle to be essentially a
>five-foot high radiator. (Horizontal components would cancel out due to
>symmetry.) Because of the capacitance to ground, it should have nearly
>constant current on it, which would make it radiate as much as a five
>foot high top loaded whip. That would have it producing a field which is
>only 3 dB down from the field from a 10 foot high top loaded whip. Or is
>something wrong with my assumptions?

I think we've been through this before, and someone even modeled a car
and found radiation from the car body wasn't a factor no matter where
the antenna was mounted.

The thing that spoils that idea is the path is very wide, and
capacitance is distributed all over the vehicle. Current spreads out
in all directions from the mounting point, instead of flowing in a
single line from end to end. The vehicle looks nothing like the skinny
conductor with capacitance at the end.

I can't recall who did the model, maybe it was Cecil. In any event
radiation from the vehicle is greatly over rated. It's a bit like the
idea the DDRR radiates from the ring, instead of the vertical portion.

73 Tom

1169. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8odrmqknq1@plutonium.btinternet.com>
Source record: 181639

Roy, thanks for your concise summary.

Like yourself, when I reply to someone directly, personally, instead of in public view via a newsgroup, I do so because I wish the e-mail itself to be confidencial.

It is extremely rare for me to respond by e-mail. A question asked in public deserves a similar reply if only for the benefit or entertainment of the bystanders. And let's face it - as I'm doing here - like most others - I obtain some satisfaction from the opportunity to talk about myself or my experiences.

On the other hand, any information via private e-mail is obviously available for the recipient to make use of. Its credence is a matter of the recipient's judgement. It goes without saying, the consequences of any following action taken by the recipient are solely his/her responsibility. I wish to receive neither credit nor blame from someone publishing what is obviously a confidential matter.

On yet another hand - when anyone makes a living out of providing information (a professional adviser), should a dispute arise any originally private correspondence may eventually become a matter of public knowledge in the law-courts. But where out-of-control newsgroups, which are international affairs, fit into the Law is merely a matter of conjecture, rent-a-riot, economic sanctions and cruise missiles.

Reg.
http://www.btinternet.com/~g4fgq.regp

1170. Re: AM Transmission antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6269-39AA702F-10@storefull-113.iap.bryant.webtv.net>
Source record: 181640

Scott Mann wrote:
"When lengthening the antenna the broadcast frequency drops, how does this work?"

Electrical generators, including radio transmitters, have two output terminals. One exudes current while the other accepts an equal amount of replacement current. In the AM broadcast bands, the usual connections are to an aerial and ground.

The circuit Scott posted includes an aerial connection (T1). If there were a T2, it would likely be connected to the negative battery terminal.

Actual grounding is accomplished through stray capacitance between the transmitter and ground. The antenna has capacitance to ground.
Increasing the length of the antenna increases the antenna`s capacitance to ground.
This capacitance shunts the tuned circuit which determines the frequency of oscillations. More capacitance across the tuned circuit means a lower frequency of oscillation.

Best regards, Richard Harrison, KB5WZI

1171. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Cory Papenfuss <papenfus@juneau.ece.uiuc.edu>
Message-ID: <Azuq5.2461$9N1.41564@vixen.cso.uiuc.edu>
Source record: 181641

I am talking about a CB antenna, but it's one I built a couple of
weeks ago. I was surprised at how more more than 1/4 waves' worth of wire
was necessary to make a 6 foot fiberglass antenna resonate. My thought is
that because the coils have to be made small and relatively close together
on this 3/8" diameter rod, perhaps large diameter free-standing base loops
as feed from the coax to the start of the small windings would increase
the antennas electrical length without increasing the inductance as much
(and not require 5/8 waves' worth of wire). I've seem some of these
around, although I'm not sure if they are for CB or 10-meter. I agree
though that for the antennas I've seen sold for CB's, they are mostly made
to be convenient and look stylish, not work well.

-Cory

Tom W8JI <2w8ji@contesting.com> wrote:
: On Sun, 27 Aug 2000 17:10:06 GMT, Cory Papenfuss
: <papenfus@juneau.ece.uiuc.edu> wrote:

:> I was just wondering if the large base-loading coil flavor of the
:>10-11M antenna (with the 4-10" diameter 5-10 coil free-air loading coil)
:>is better than the continuously-loaded 5/8 wave fiberglass type.

: Cory,

: Are you talking abourt CB antennas, that are mostly made to sell
: rather than to work?

: 5/8 wl of wire on a 6 foot whip radiates like a 6 foot long antenna,
: or worse. It will be a small amount worse than a full size 1/4 whip.
: Winding more wire than necessary on it to make it resonant makes iut
: WORSE, not better.

: A base loaded antenna will be a tiny bit worse than a full size 1/4 wl
: whip, all other things equal.

: All that crap is just a sales gimmick, like the little hoops CB'ers
: buy and mount near the bottom of the antennas.

: 73 Tom

--

1172. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Cory Papenfuss <papenfus@juneau.ece.uiuc.edu>
Message-ID: <%Duq5.2462$9N1.41564@vixen.cso.uiuc.edu>
Source record: 181642

Although it's been awhile since I took my last EM waves class, I
recall something about the permeability of ferrous material screwing with
the characteristics of an antenna. It will most certainly add more self
inductance to the wire itself. If you are getting a good match perhaps
it's because it's actually running 3/4 or 5/4 wave match. I'm not sure.

-Cory

Jesper Wolf Jespersen <jwj@ehuset.com> wrote:
: Hello there.

: I went and built me a new antenna this weekend.

: Its not exactly a fancy antenna, a two legged dipole for 40, 20 and 15
: metres.

: The Wire I used was 1.3 mm steel wire with transparant plastic coating, this
: was selected for strength since the antenna carries it self, the balun and
: feedline and thus needs to be pretty taught.

: The dipoles are terminated in antenna eggs (porcelain insulators) and tied
: to 5 mm flagline (synthetic).

: The end points are two trees at the back of the garden, in aproximately 4
: metres height and two antenna posts on the roof of our house in about 8
: metres height. All antenna endpoints are at least 2 metres from any "ground"
: potential and they are hanging free.

: The two legs ended up being 4.755 m for the 20 metres band and 9.84 m for
: the 40 metres band, they are space aprox 45 degrees horisontally. (Looks
: like a giant spider had started a web over the garden :-)

: The VSWR on 40 is below 1.6 at the resonance point 7.075 MHz, on 20 m the
: VSWR is below 1.8 at the resonance point of 14.200 MHz.

: But the antenna does not have a resonanse on 15 m and the VSWR here is above
: 2 all the way, falling a bit towards the higher frequencies.

: I dont realy understand this, I would have expected a clear ressonance at
: 21.230.
: Likewise I would have expected the VSWR's to be lower. (1.2-1.5)

: Previously I had two dipoles up using copper cable, 1.5 square mm strength,
: for the 40 and 10 metres bands. Placed at exactly the same position as the
: two I have now.
: The 40 metres dipole using copper cable was aproximately 20 cm longer with
: the same ressonance frequency as the steel wire, and I had a nice VSWR below
: 1.6 on 15 metres.

: The reason I changed the setup was that the antenna didnt work to well in
: wet conditions, the synthetic line was simply a signal drain when wet and
: since the antennawire was just piggybacked on the flagline there was no way
: to isolate them.

: I changed the 10 Metres dipole to a 20 Metres dipole simply because I had
: more traffic there.

: Now I am a bit baffled because I cannot get the calculations to match this
: antenna.

: Normally the length of an antenna is given by the formula :
: L = 0.95*(300 / F0)/4

: L : quarter wavelength
: 0.95 : light speed reduction in antenna material
: 300 : Speed of light (million kilometres pr second)
: F0 : Centre Frequency in MHz

: The lengths of the two dipole legs would have been 10.07 m and 5.02 m if
: this equation was exact.
: It seems the speed reduction factor is larger for steel wire, but the two
: legs indicate different reduction factors:
: 0.93 at 7 MHz and 0.90 at 14 MHz.

: This does not seem resonable, the steel wire is not as good a conductor as
: copper but I would expect the speed reduction factor to be constant.

: Have I been dumb in selecting this antenna material ?

: I have tried to check for errors, have checked that the legs are symetric
: and even cut a few branches of a plumb tree that came close to the antenna.
: But I have no explanation for the phenomenon.

: The antenna Works, I have had DX contacts on both 40m and 20m, but I cannot
: compare to my old setup. The conditions on 20 have been poor over the
: weekend so I cannot say if the antenna is worse than before.

: Does any of you have helpfull comments ?

: I think it is fun experimenting with antennas, but I like to see progress or
: at least a good explanation to why I had a setback.

: Greetings from Denmark

: Jesper Wolf Jespersen

--

1173. WTB: HJ5 and LDF6 Heliax Connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Paul Vanasse <pvanasse@mail.direcpc.com>
Message-ID: <H7vq5.1490$TX2.66633@news.direcpc.com>
Source record: 181643
Cross-posted to: alt.ham-radio.ssb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

N connectors preferred. Please email price and condition.

Thanks and 73

1174. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <8odvim$8kc$1@slb2.atl.mindspring.net>
Source record: 181644

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:xwnq5.2292$V67.83745@newshog.newsread.com...
> Depends on the distance to the repeaters and the distance to the next
> closest on the same frequencies. If one is 20 miles in one direction and
> the other is 105 (if they stick to the 125 mile rule) you will be keying
> both with anything other than a relatively low antenna and power. Here
the
> Yagi might help though as it *might* reduce the signal off the back enough
> that you wouldn't key the repeater in that direction.
>
> I say that power and gain are not important as I can easily work 150 plus
> miles from the airplane using 5 watts or less and a rubber duck antenna.
> That is from well less than 10,000 feet.

Well, here's my main problem. I live just south of Birmingham, Alabama.
Between me and Birmingham is a mountain (Double Oak Mtn)! I can hear all the
repeaters just fine, but my five watt hand held just can't reach them, even
using a tree mounted antenna. That's why I got the new radio, hoping a
little more umph will let me get over the mountain to the repeaters.

I think I'll start off using the antenna I have on hand and see if it will
get out. (It's a MFJ portable J-Pole on the end of 50 foot of RG8, stuck up
in a tree). If so, I'll just stick with it.

By the way, does anyone know where I can look up the radiation safety
tables? I want to be able to use the 45 watt radio in my car. I have a mag
mount antenna which is on the truck right now. However, I want to be sure
not to harm my two young daughters when they ride in the back seat. I wanted
to see if I needed to move the antenna up to the roof, or is it OK on the
trunk.

Thanks again to everyone,

Robert KG4FGN

1175. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aa8083.26012149@news.akorn.net>
Source record: 181645

On Mon, 28 Aug 2000 14:21:20 GMT, Cory Papenfuss
<papenfus@juneau.ece.uiuc.edu> wrote:

> I am talking about a CB antenna, but it's one I built a couple of
>weeks ago. I was surprised at how more more than 1/4 waves' worth of wire
>was necessary to make a 6 foot fiberglass antenna resonate. My thought is
>that because the coils have to be made small and relatively close together
>on this 3/8" diameter rod, perhaps large diameter free-standing base loops
>as feed from the coax to the start of the small windings would increase
>the antennas electrical length without increasing the inductance as much
>(and not require 5/8 waves' worth of wire). I've seem some of these
>around, although I'm not sure if they are for CB or 10-meter. I agree
>though that for the antennas I've seen sold for CB's, they are mostly made
>to be convenient and look stylish, not work well.

The physical length of a wire inside an antenna, when it is not
spatially in a straight line, has little to do with electrical length.

It's a common misunderstanding that a coil loadsing an antenna (a
helical antenna would fit this description, except the inductance and
capacitance is distributed) "makes up for missing length" .

All the "extra wire" does is provide inductive reactance to cancel
capacitive reactance.

CB manufacturers try to jam as much wire in a given area as they can,
and still have resonance, because they can sell the antenna to people
who think more wire in a small space somehow is better. This pretty
much always increases losses over an optimum form factor.

73 Tom

1176. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8oe1k3$5d6$1@nntp9.atl.mindspring.net>
Source record: 181646

Tom W8JI <2w8ji@contesting.com> wrote in message
<39aa6b74.20620018@news.akorn.net>...
>
>I can't recall who did the model, maybe it was Cecil.
>
>73 Tom

What has happened to Cecil? It is not like him to miss all the "fun" that goes on here! Especially when mobile antennas and shootouts are mentioned.

Dean Craft -- W4IHK

1177. Re: High Sierra antenna on apt. roof question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8oe4a5$gq5$1@nnrp1.deja.com>
Source record: 181647

In article <20000828000112.04205.00000098@ng-fw1.aol.com>,
n9yln@aol.com (N9YLN) wrote:
> We would like to use a High Sierra HS-1500MKII on the roof of the
apartment
> where we live. Has anyone done this? How was the installation done?
Is a
> counterpoise needed? Please email me direct at: N9YLN@aol.com
> Any help would be greatly appreciated!!
> 73,
> Renee
>

Renee,
Yes you can do it quite easily; the biggest problem may be lenght of
the power run for the motor.
If you contact HS that have a very good multiband counterpoise
description that you can build using 300-twin lead this information
normally was sent with the antenna but I am quite sure that if you
contact them they will send you a copy.

(HINT HINT HINT may be they will put it on the web page)

I have installed (3) on my garage roof for emergency work and even
went to the point of putting some in on my beach cabana this way I can
bring my 706, some hefty gel cells and the antenna and use it at the
Hamptons.
Yes I do get some strange questions about it but I just tell them that
it is a "cell phone booster".

BTW if you want you can paint the antenna to match.
Some one that is living in a NO NO community painted his to match the
brickwork of his chimney and from the ground it is Invisible, he
braided the counterpoises into the architectural roof shingles.

Enjoy...

73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?

Sent via Deja.com http://www.deja.com/
Before you buy.

1178. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <8oe575gbb1@news.service.uci.edu>
Source record: 181648

Gerald Schmitt <kk5yy@arrl.net> wrote in message
news:39aabdc8.334260767@nntp.mindspring.com...
> His behavior put me to mind of a quote from the old Star Trek.
> A Klingon having had just about enough of James Tiberius
> Kirk lets go with,"You're a two bit tin plated dictator with
> delusions of godhood". If the quote don't fit Chipper don't
> wear it so often.

As I recall, the word "overbearing" was used in there somewhere too. ;-)

Best not say that anything "should be hauled away AS garbage" or the real
fighting will start. :-)

73, Jim AC6XG

1179. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AAA804.9BE00DB5@eznec.com>
Source record: 181649

The real problem with permeability is that it reduces the skin depth, which in turn increases the RF resistance. If a wire has a relative permeability of, say, 100, its RF resistance is ten times greater than it would be if the relative permeability were one. Steel has high resistivity to begin with, so the combination results in a very lossy antenna. Loss will increase the antenna's bandwidth, with the extreme case being essentially a dummy load. Steel wire isn't a good choice if you want to radiate the maximum amount of signal.

Roy Lewallen, W7EL

Cory Papenfuss wrote:
>
> Although it's been awhile since I took my last EM waves class, I
> recall something about the permeability of ferrous material screwing with
> the characteristics of an antenna. It will most certainly add more self
> inductance to the wire itself. If you are getting a good match perhaps
> it's because it's actually running 3/4 or 5/4 wave match. I'm not sure.
>
> -Cory

1180. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: "MonsterFM.com" <engineering@MonsterFM.com>
Message-ID: <8oeavb$pa6$1@nnrp1.deja.com>
Source record: 181650

In article <8oe575gbb1@news.service.uci.edu>,
"Jim Kelley" <jwkelley@uci.edu> wrote:

> As I recall, the word "overbearing" was used in there somewhere
too. ;-)
>
> Best not say that anything "should be hauled away AS garbage" or the
real
> fighting will start. :-)
>

I'm having trouble placing Chip (and all of his other alternate
personalities) in the place of a furry little tribble. An ass,
definitely! A tribble, NEVER!

--
Terry Keith Hammond
President/Chief Engineer

Broadcast Services
P.O. Box 155
Mount Vernon, Texas 75457

http://MonsterFM.com

(903) 562-1978

The radio business is a cruel and shallow money trench, a long plastic
hallway where thieves and pimps run free, and
good men die like dogs.
There's also a negative side."
- Hunter S. Thompson

Sent via Deja.com http://www.deja.com/
Before you buy.

1181. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39AAA86E.470E113B@roadrunner.nf.net>
Source record: 181651

Bob Miller wrote:

> Bill, KC8MVW <tracker8565@my-deja.com> wrote:
>
> >Hello to the group,
> > I have built and tuned one of the above antennas, but for some reason
> >it doesn't perform the way it should. I was told that the building that
> >I now reside in was built with a grounded steel mesh under the
> >plaster. I have no way of getting the antenna outdoors and in
> >the "clear." A local ham informed me that there are plans for an
> >indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and
> >should work in my room without a problem.
>
> Why would a j-pole transmit through your steel mesh walls when your
> current antenna won't? Are you planning to stick the j-pole out the
> window?
>
> Maybe I'm misinterpreting your words above, but it sounds like you
> want to use the j-pole indoors.
>
> Bob
> k5qwg
>
> > Would anyone know where I
> >can find that site, or have the plans available? Thanks for all the
> >help in advance.
> >-73's-
> >BB
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.

Comment re above.

Lived in an aluminium shell trailer many years ago. Couldn't receive a thing inside, most frequencies, (so I probably could not have transmitted out either!). Even had to put our receiving TV receiving antenna outside on a four foot fence; it worked quite well even when buried in snow!

Also our first house was completely lined with aluminium foil, in addition to fibreglass insulation. That also weakened the reception of all radio signals, although we were on a hill which possibly helped?

Point I'm making is that any metallic 'shell' will tend to contain radio waves within it or prevent (weaken) radio waves coming in.

I gather that almost 'anything' outside, even a very fine gauge wire dangled out of a window with an inconspicuous weight on the end is better than anything within the metallic shell of a steel framed or meshed building? For example the local Radio Shack stores are almost always in steel framed buildings. They will tell you "No good trying to test anything in here! a) Too weak a signal and b) too much electrical interefrence. Electrical pollution shouldn't be allowed btw.

Quite often there have been postings about inconspicuous or 'secret' antenna on these news groups.

This is a bit off the topic but one famous amateur told me that he managed to 'load up' (by experimenting with the matching to his mobile transmitter) the roof section of his all metal body saloon car! And actually made a QSO with it! So the message might be that if you temporarily put your metal ironing board out on an apartment balcony and match it up, somehow, to your transmitter it MIGHT work.

An idea.

1182. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Cory Papenfuss <papenfus@juneau.ece.uiuc.edu>
Message-ID: <3fyq5.2530$9N1.42316@vixen.cso.uiuc.edu>
Source record: 181652

Oh yeah... Skin depth goes as sqrt of permiability and
frequency... Now I remember... :)

-cory

Roy Lewallen <w7el@eznec.com> wrote:
: The real problem with permeability is that it reduces the skin depth,
: which in turn increases the RF resistance. If a wire has a relative
: permeability of, say, 100, its RF resistance is ten times greater than
: it would be if the relative permeability were one. Steel has high
: resistivity to begin with, so the combination results in a very lossy
: antenna. Loss will increase the antenna's bandwidth, with the extreme
: case being essentially a dummy load. Steel wire isn't a good choice if
: you want to radiate the maximum amount of signal.

: Roy Lewallen, W7EL

: Cory Papenfuss wrote:
:>
:> Although it's been awhile since I took my last EM waves class, I
:> recall something about the permeability of ferrous material screwing with
:> the characteristics of an antenna. It will most certainly add more self
:> inductance to the wire itself. If you are getting a good match perhaps
:> it's because it's actually running 3/4 or 5/4 wave match. I'm not sure.
:>
:> -Cory

--

1183. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <rbclqssumnl86glvqk591jvl0tlrj4mblr@4ax.com>
Source record: 181653

I guess I'm not going to get a reply to my below missive... Were there
too many nickel words it it, or was it too long, Chip?

Or perhaps I've been circular-filed without notice or verifiable
reason?

Or is it that there are no data to share that would be of any worth?

Which is it?

Who knows?

Alas.. no enlightenment for the masses.

-SSB

On or about Mon, 28 Aug 2000 07:59:27 -0400, sideband
<sideband@cac.net>, using the forum rec.radio.amateur.antenna did say:

:Um, Chip, Methinks your skin be too thin.
:
:
:He did say "seems", which, to most people, indicates a personal
:opinion or viewpoint is being expressed. He didn't say "is", which
:would be a statement of fact. As I see it, his comment was not
:directed at you personally, nor does it seem to have been phrased to
:denigrate, degrade, slander, libel, or otherwise harm you, your
:business, or your family's supper.
:
:Please note: THE FOLLOWING IS MY PERSONAL VIEW ON THIS SUBJECT, and is
:not a statement of fact. It seems to me, reading your responses to
:other posts, most oft taken out of context, that you have been baiting
:the readers of this news group in order to foster a "poor me" feeling
:amongst the netizens herein, thereby passively marketing your
:antenna(e) passively to those susceptible to the "sympathy purchase".
:
:This, I feel, is why some have outwardly criticized your posts, and
:have gone as far as to assume everything posted by "somename"@aol.com,
:who has never appeared anywhere in any news group (nor anywhere since
:then) has been an "alternate personality" of yours, to foster some
:support for your particular ideas and potential products.
:
:Then again, their outward objections to this perceived tactic has
:enabled you, in my view, to continue garnering sympathy ("poor me, buy
:my antennae") by posting messages alluding to lawsuits, etc, which
:prompts more outward objections, which prompts you to post some more
:about lawsuits, ad infinitum. It seems (there's that word again!) to

:be a never ending cycle, which resembles poison ivy (there's that
:metaphor again).
:
:If we were ever given technical specifications about your antennae,
:where they would be best put to use, where their efficiency gain is
:seen, conditions under which another antenna would be a better choice,
:etc, I have never seen it. I have seen posts about web sites which
:provide vague data (at best), web sites showing patent applications
:which read like stereo instructions that were originally written in
:Swahili, translated to German, then Japanese, then finally English,
:and no other real data upon which I could base an opinion one way or
:the other on any fractal antenna design.
:
:All I have been presented with is threads upon threads upon threads of
:people asking for information, you claiming it's an affront to your
:potential business prospects, and you threatening lawsuits, etc,
:against the netizens of this particular news group.
:
:Would it be possible to end this chain of perceived abuse, statement
:of opinion, threats, insults, and the like, and get some real data on
:this subject so that we may make an intelligent, informed decision as
:to the merits of such a technology, and where it would best be used?
:
:Or are we to continue upon the present path, in which no one gets any
:answers, and nothing is accomplished?
:
:Just the two cents of a CB'er who hopes one day to become a HAM.
:
:-SSB
:

1184. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AAB509.63522A24@oio.net>
Source record: 181654

Jesper Wolf Jespersen wrote:
>
> Hello there.
>
> I went and built me a new antenna this weekend.
>
> Its not exactly a fancy antenna, a two legged dipole for 40, 20 and 15
> metres.
>
> The Wire I used was 1.3 mm steel wire with transparant plastic coating, this
> was selected for strength since the antenna carries it self, the balun and
> feedline and thus needs to be pretty taught.
>
> The dipoles are terminated in antenna eggs (porcelain insulators) and tied
> to 5 mm flagline (synthetic).
>
> The end points are two trees at the back of the garden, in aproximately 4
> metres height and two antenna posts on the roof of our house in about 8
> metres height. All antenna endpoints are at least 2 metres from any "ground"
> potential and they are hanging free.
>
> The two legs ended up being 4.755 m for the 20 metres band and 9.84 m for
> the 40 metres band, they are space aprox 45 degrees horisontally. (Looks
> like a giant spider had started a web over the garden :-)
>
> The VSWR on 40 is below 1.6 at the resonance point 7.075 MHz, on 20 m the
> VSWR is below 1.8 at the resonance point of 14.200 MHz.
>
> But the antenna does not have a resonanse on 15 m and the VSWR here is above
> 2 all the way, falling a bit towards the higher frequencies.
>
> I dont realy understand this, I would have expected a clear ressonance at
> 21.230.
> Likewise I would have expected the VSWR's to be lower. (1.2-1.5)
>
> Previously I had two dipoles up using copper cable, 1.5 square mm strength,
> for the 40 and 10 metres bands. Placed at exactly the same position as the
> two I have now.
> The 40 metres dipole using copper cable was aproximately 20 cm longer with
> the same ressonance frequency as the steel wire, and I had a nice VSWR below
> 1.6 on 15 metres.
>
> The reason I changed the setup was that the antenna didnt work to well in
> wet conditions, the synthetic line was simply a signal drain when wet and

> since the antennawire was just piggybacked on the flagline there was no way
> to isolate them.
>
> I changed the 10 Metres dipole to a 20 Metres dipole simply because I had
> more traffic there.
>
> Now I am a bit baffled because I cannot get the calculations to match this
> antenna.
>
> Normally the length of an antenna is given by the formula :
> L = 0.95*(300 / F0)/4
>
> L : quarter wavelength
> 0.95 : light speed reduction in antenna material
> 300 : Speed of light (million kilometres pr second)
> F0 : Centre Frequency in MHz
>
> The lengths of the two dipole legs would have been 10.07 m and 5.02 m if
> this equation was exact.
> It seems the speed reduction factor is larger for steel wire, but the two
> legs indicate different reduction factors:
> 0.93 at 7 MHz and 0.90 at 14 MHz.
>
> This does not seem resonable, the steel wire is not as good a conductor as
> copper but I would expect the speed reduction factor to be constant.
>
> Have I been dumb in selecting this antenna material ?
>
> I have tried to check for errors, have checked that the legs are symetric
> and even cut a few branches of a plumb tree that came close to the antenna.
> But I have no explanation for the phenomenon.
>
> The antenna Works, I have had DX contacts on both 40m and 20m, but I cannot
> compare to my old setup. The conditions on 20 have been poor over the
> weekend so I cannot say if the antenna is worse than before.
>
> Does any of you have helpfull comments ?
>
> I think it is fun experimenting with antennas, but I like to see progress or
> at least a good explanation to why I had a setback.
>
> Greetings from Denmark
>
> Jesper Wolf Jespersen

Jesper,
I don't think the problem is the steel wire that you made the
antenna from, so much as the change in bands covered. The old antenna
used a 40 meter and 10 meter combination. The new antenna uses a
40 meter and 20 meter combination. I think that's why 15 meters

doesn't work so well on the new antenna.
What you make the antenna out of, copper wire or steel wire, will have some affect on the efficiency and length of the antenna. As long as the material used is within reason, you should get satisfactory results. (Copper, steel, aluminum... reasonable. Nichrome, or other 'resistive' types... unreasonable. I'd include silver and gold wire in the unreasonable group too!)
Try changing the 20 meter part back to 10 meters, that may 'cure' the 'set back'.
'Doc

1185. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AAB73D.2D5A8BAB@oio.net>
Source record: 181655

rsm wrote:
>
> Does anything really work very well?

The 'quick and dirty' answer is, no. But that depends on
your definition of 'well'. If you start of realizing that
a 10% efficiency mobile antenna is probably the 'best' you'll
ever get, then you will find that there are a few 'good'
80 meter mobile antennas.
The 'key' to mobile antennas is "big and ugly". The lower
the frequency, the bigger and uglier the antenna. For the
'best' 80 meter mobile antenna, get the biggest and ugliest
you can find. (Not a very scientific solution, but you'll
find that it's true.)
'Doc
PS - Another helpful hint for mobile operation;
"If it sounds too good to be true, it usually is."

1186. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39aab196.3361627@news.mcn.org>
Source record: 181656

On Mon, 28 Aug 2000 13:45:32 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>
>Hi Roy
>
>On Mon, 28 Aug 2000 01:38:08 -0700, Roy Lewallen <w7el@eznec.com>
>wrote:
>
>>
>>That surprises me. If an antenna is mounted at the center of the roof of
>>a five-foot high vehicle, I'd expect the vehicle to be essentially a
>>five-foot high radiator. (Horizontal components would cancel out due to
>>symmetry.) Because of the capacitance to ground, it should have nearly
>>constant current on it, which would make it radiate as much as a five
>>foot high top loaded whip. That would have it producing a field which is
>>only 3 dB down from the field from a 10 foot high top loaded whip. Or is
>>something wrong with my assumptions?
>
>
>I think we've been through this before, and someone even modeled a car
>and found radiation from the car body wasn't a factor no matter where
>the antenna was mounted.
>
>The thing that spoils that idea is the path is very wide, and
>capacitance is distributed all over the vehicle. Current spreads out
>in all directions from the mounting point, instead of flowing in a
>single line from end to end. The vehicle looks nothing like the skinny
>conductor with capacitance at the end.
>
>I can't recall who did the model, maybe it was Cecil. In any event
>radiation from the vehicle is greatly over rated. It's a bit like the
>idea the DDRR radiates from the ring, instead of the vertical portion.
>
>73 Tom

Hi Tom

I note that in Jack Belrose article in Volume 4 of the ARRL Antenna
Compendium on HF mobile antennas. He shows calculated azimuth antenna
patterns varying about 4 dB, depending upon the antenna's location on
his GMC Jimmy truck.

Danny, K6MHE

1187. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39AABE22.41C67EA6@my-deja.com>
Source record: 181657

Bill, KC8MVW wrote:
>
> Hello to the group,
> I have built and tuned one of the above antennas, but for
> some reason it doesn't perform the way it should. I was told
> that the building that I now reside in was built with a
> grounded steel mesh under the plaster.
> I have no way of getting the antenna outdoors and in
> the "clear." A local ham informed me that there are plans for an
> indoor twin lead j-pole that goes inside of a pvc or cpvc pipe and
> should work in my room without a problem. Would anyone know where I
> can find that site, or have the plans available? Thanks for all the
> help in advance.
> -73's-
> BB

BB,

I read all the other posts but no one actually gave you a web
site to look at. Here is the address of a web site that features
a twin-lead J-Pole for 2M/440MHz. It also has one that fits
in a piece of 3/4" PVC.

http://www.thedragonmaster.com/j-pole.html

Good Luck with it.

Martin K7MEM

--
Martin E. Meserve K7MEM, ex KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1188. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000828153619.22663.00002032@ng-cg1.aol.com>
Source record: 181658

>I guess I'm not going to get a reply to my below missive... Were there
>too many nickel words it it, or was it too long, Chip?
>
>Or perhaps I've been circular-filed without notice or verifiable
>reason?
>
>Or is it that there are no data to share that would be of any worth?
>
>Which is it?
>
>Who knows?
>
>Alas.. no enlightenment for the masses.
>
>-SSB
>
>On or about Mon, 28 Aug 2000 07:59:27 -0400, sideband
><sideband@cac.net>, using the forum rec.radio.amateur.antenna did say:
>
>:Um, Chip, Methinks your skin be too thin.
>:
>:
>:He did say "seems", which, to most people, indicates a personal
>:opinion or viewpoint is being expressed. He didn't say "is", which
>:would be a statement of fact. As I see it, his comment was not
>:directed at you personally, nor does it seem to have been phrased to
>:denigrate, degrade, slander, libel, or otherwise harm you, your
>:business, or your family's supper.
>:
>:Please note: THE FOLLOWING IS MY PERSONAL VIEW ON THIS SUBJECT, and is
>:not a statement of fact. It seems to me, reading your responses to
>:other posts, most oft taken out of context, that you have been baiting
>:the readers of this news group in order to foster a "poor me" feeling
>:amongst the netizens herein, thereby passively marketing your
>:antenna(e) passively to those susceptible to the "sympathy purchase".
>:
>:This, I feel, is why some have outwardly criticized your posts, and
>:have gone as far as to assume everything posted by "somename"@aol.com,
>:who has never appeared anywhere in any news group (nor anywhere since
>:then) has been an "alternate personality" of yours, to foster some
>:support for your particular ideas and potential products.
>:
>:Then again, their outward objections to this perceived tactic has
>:enabled you, in my view, to continue garnering sympathy ("poor me, buy

>:my antennae") by posting messages alluding to lawsuits, etc, which
>:prompts more outward objections, which prompts you to post some more
>:about lawsuits, ad infinitum. It seems (there's that word again!) to
>:be a never ending cycle, which resembles poison ivy (there's that
>:metaphor again).
>:
>:If we were ever given technical specifications about your antennae,
>:where they would be best put to use, where their efficiency gain is
>:seen, conditions under which another antenna would be a better choice,
>:etc, I have never seen it. I have seen posts about web sites which
>:provide vague data (at best), web sites showing patent applications
>:which read like stereo instructions that were originally written in
>:Swahili, translated to German, then Japanese, then finally English,
>:and no other real data upon which I could base an opinion one way or
>:the other on any fractal antenna design.
>:
>:All I have been presented with is threads upon threads upon threads of
>:people asking for information, you claiming it's an affront to your
>:potential business prospects, and you threatening lawsuits, etc,
>:against the netizens of this particular news group.
>:
>:Would it be possible to end this chain of perceived abuse, statement
>:of opinion, threats, insults, and the like, and get some real data on
>:this subject so that we may make an intelligent, informed decision as
>:to the merits of such a technology, and where it would best be used?
>:
>:Or are we to continue upon the present path, in which no one gets any
>:answers, and nothing is accomplished?
>:
>:Just the two cents of a CB'er who hopes one day to become a HAM.
>:
>:-SSB
>:

I'm more than happy to help:-)

Since 1995 I have published about a dozen articles in ham magazines detailing such specifics. Thus, may I suggest you look in the ham literature, and the NG archives for suggested articles, OR, pose your question on the fractal antenna reflector?

Also, on the ham page of

http://www.fractenna.com

you will find two of many examples of fractal antennas which are SUPERIOR TO OTHERS IN PERFORMANCE for the needs they address. Not equal, not ok, but SUPERIOR.

You will also note that, to help demonstrate this, I have posed a $1000 CHALLENGE. So far, none of the entries have come close:-) Check the back posts for your enlightenment on the objectively stated rules:-)

It's a pleasure to see your interest in fractal antennas and I actively urge you to explore further and ask interesting questions! As always, time permitting, I will be happy to help through the reasonable and responsible means I have outlined.

You will also note that not only have I been forthcoming with said info in the last 5 years, but continue to take time from a bust schedule to answer the deserving:-) Just come to the fractal antenna reflector:

fractalantenna-subscribe@egroups.com

I regret that I cannot answer more specific questions on fractal antennas on this NG: the fractal antenna reflector has been found to be the best way to help others and provide a meaningful, fun, and archived record.

Very Best to you!

73
Nathan 'Chip' Cohen, Ph.D.
N1IR

1189. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aabeb2.41933793@news.akorn.net>
Source record: 181659

On Mon, 28 Aug 2000 18:43:24 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:

>Hi Tom
>
>I note that in Jack Belrose article in Volume 4 of the ARRL Antenna
>Compendium on HF mobile antennas. He shows calculated azimuth antenna
>patterns varying about 4 dB, depending upon the antenna's location on
>his GMC Jimmy truck.

What elevation angle were the plots at? What polarization?

73 Tom

1190. SPI-RO MFG TRAP DIPOLES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: kk4bh@aol.comnospam
Message-ID: <20000828160127.20899.00000314@ng-cf1.aol.com>
Source record: 181660

Has anybody had experiences with the Spi-Ro brand trap dipoles? Want to put up a multiband resonant dipole. The W9INN's seem to perform very well (heard much good about them) and was just curious about the Spi-Ro's. TNX in advance.

73's
Ken Bjorklund
KK4BH
remove "nospam" when replying

1191. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8oeiim$2vd$1@nnrp1.deja.com>
Source record: 181661

In article <39AABE22.41C67EA6@my-deja.com>,
Martin Meserve <meserve@my-deja.com> wrote:
> I read all the other posts but no one actually gave you a web
> site to look at. Here is the address of a web site that features
> a twin-lead J-Pole for 2M/440MHz. It also has one that fits
> in a piece of 3/4" PVC.
>
> http://www.thedragonmaster.com/j-pole.html
>
> Good Luck with it.
>
> Martin K7MEM
>

The 300-Ohm twin-lead 2-meter J-Pole works great on 2-meters, but those who claim it to be a dual-band antenna are wrong. Yes, the SWR is low, but the performance stinks, to put it mildly.

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

1192. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <52hlqss67b53ker1f4rg7ffgiu48mi4s7f@4ax.com>
Source record: 181662

Chip:

The website is nothing more than the same data which has been bandied about for who knows how long. Not to mention there are no real test data concerning I'd asked some specific questions about where, on the web, I might find performance data and/or comparisons between the fractenna and a "conventional" antenna.

Specifically, I'm seeking comparison between:
A. a dipole in free space vs fractenna in free space
B. a dipole in real space vs fractenna in real space. real space being defined as in a tree, on a tower, along the side of the building.
C. a dipole below ground, not buried, vs fractenna below ground, not buried. For example, in a basement.

Dipoles should all be vertical.

In all cases, I would like to see the following test criteria met.

1. Both antennae should be tested in the same space, or as close to the same space as is possible.
2. The same transmitter is used for all tests.
3. The power of the transmitter is not varied.
4. The transmitted frequency is not varied more than 10 cycles throughput the test.
5. The transmission will be an unmodulated AM carrier at 2 watts RMS.
6. The same field strength meter will be used for all tests.
7. The location of the field strength meter will not me changed between tests of the two different antennae in the same location.
8. The field strength meter will be no less than 4 wavelengths from the antenna, and no more than 20 wavelengths from the antenna. Further away is preferable.
9. The antennae should be "tuned" for best SWR possible.
10. The tests should be conducted both by you, Chip, as you claim the antenna's superiority, and by a volunteer from this newsgroup. I cannot perform the tests myself, as I lack the required equipment, and I am unable to hang external antennae at my apartment.

On or about 28 Aug 2000 19:36:19 GMT, fractenna@aol.com (Fractenna), using the forum rec.radio.amateur.antenna did say:

:>I guess I'm not going to get a reply to my below missive... Were there
:>too many nickel words it it, or was it too long, Chip?
:>
:>Or perhaps I've been circular-filed without notice or verifiable
:>reason?

:>
:>Or is it that there are no data to share that would be of any worth?
:>
:>Which is it?
:>
:>Who knows?
:>
:>Alas.. no enlightenment for the masses.
:>
:>-SSB
:>
:>On or about Mon, 28 Aug 2000 07:59:27 -0400, sideband
:><sideband@cac.net>, using the forum rec.radio.amateur.antenna did say:
:>
:>:Um, Chip, Methinks your skin be too thin.
:>:
:>:
:>:He did say "seems", which, to most people, indicates a personal
:>:opinion or viewpoint is being expressed. He didn't say "is", which
:>:would be a statement of fact. As I see it, his comment was not
:>:directed at you personally, nor does it seem to have been phrased to
:>:denigrate, degrade, slander, libel, or otherwise harm you, your
:>:business, or your family's supper.
:>:
:>:Please note: THE FOLLOWING IS MY PERSONAL VIEW ON THIS SUBJECT, and is
:>:not a statement of fact. It seems to me, reading your responses to
:>:other posts, most oft taken out of context, that you have been baiting
:>:the readers of this news group in order to foster a "poor me" feeling
:>:amongst the netizens herein, thereby passively marketing your
:>:antenna(e) passively to those susceptible to the "sympathy purchase".
:>:
:>:This, I feel, is why some have outwardly criticized your posts, and
:>:have gone as far as to assume everything posted by "somename"@aol.com,
:>:who has never appeared anywhere in any news group (nor anywhere since
:>:then) has been an "alternate personality" of yours, to foster some
:>:support for your particular ideas and potential products.
:>:
:>:Then again, their outward objections to this perceived tactic has
:>:enabled you, in my view, to continue garnering sympathy ("poor me, buy
:>:my antennae") by posting messages alluding to lawsuits, etc, which
:>:prompts more outward objections, which prompts you to post some more
:>:about lawsuits, ad infinitum. It seems (there's that word again!) to
:>:be a never ending cycle, which resembles poison ivy (there's that
:>:metaphor again).
:>:
:>:If we were ever given technical specifications about your antennae,
:>:where they would be best put to use, where their efficiency gain is
:>:seen, conditions under which another antenna would be a better choice,
:>:etc, I have never seen it. I have seen posts about web sites which
:>:provide vague data (at best), web sites showing patent applications

:>:which read like stereo instructions that were originally written in
:>:Swahili, translated to German, then Japanese, then finally English,
:>:and no other real data upon which I could base an opinion one way or
:>:the other on any fractal antenna design.
:>:
:>:All I have been presented with is threads upon threads upon threads of
:>:people asking for information, you claiming it's an affront to your
:>:potential business prospects, and you threatening lawsuits, etc,
:>:against the netizens of this particular news group.
:>:
:>:Would it be possible to end this chain of perceived abuse, statement
:>:of opinion, threats, insults, and the like, and get some real data on
:>:this subject so that we may make an intelligent, informed decision as
:>:to the merits of such a technology, and where it would best be used?
:>:
:>:Or are we to continue upon the present path, in which no one gets any
:>:answers, and nothing is accomplished?
:>:
:>:Just the two cents of a CB'er who hopes one day to become a HAM.
:>:
:>:-SSB
:>:
:
:
:I'm more than happy to help:-)
:
:Since 1995 I have published about a dozen articles in ham magazines detailing
:such specifics. Thus, may I suggest you look in the ham literature, and the NG
:archives for suggested articles, OR, pose your question on the fractal antenna
:reflector?
:
:Also, on the ham page of
:
:http://www.fractenna.com
:
:you will find two of many examples of fractal antennas which are SUPERIOR TO
:OTHERS IN PERFORMANCE for the needs they address. Not equal, not ok, but
:SUPERIOR.
:
:You will also note that, to help demonstrate this, I have posed a $1000
:CHALLENGE. So far, none of the entries have come close:-) Check the back posts
:for your enlightenment on the objectively stated rules:-)
:
:It's a pleasure to see your interest in fractal antennas and I actively urge
:you to explore further and ask interesting questions! As always, time
:permitting, I will be happy to help through the reasonable and responsible
:means I have outlined.
:
:You will also note that not only have I been forthcoming with said info in the
:last 5 years, but continue to take time from a bust schedule to answer the

:deserving:-) Just come to the fractal antenna reflector:
:
:fractalantenna-subscribe@egroups.com
:
:
:I regret that I cannot answer more specific questions on fractal antennas on
:this NG: the fractal antenna reflector has been found to be the best way to
:help others and provide a meaningful, fun, and archived record.
:
:Very Best to you!
:
:73
:Nathan 'Chip' Cohen, Ph.D.
:N1IR

1193. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39aac8dc.463522@news.mcn.org>
Source record: 181663

On Mon, 28 Aug 2000 19:37:56 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Mon, 28 Aug 2000 18:43:24 GMT, k6mhe@arrl.net (Dan Richardson)
>wrote:
>
>>Hi Tom
>>
>>I note that in Jack Belrose article in Volume 4 of the ARRL Antenna
>>Compendium on HF mobile antennas. He shows calculated azimuth antenna
>>patterns varying about 4 dB, depending upon the antenna's location on
>>his GMC Jimmy truck.
>
>What elevation angle were the plots at? What polarization?
>
>73 Tom

Most of the azimuth plots are at 30 to 33ï¿½ elevation. His graphs show
total, horizontal and vertical. Total and vertical are very close with
a very small horizontal gain in a more or less dipole type pattern.

73,
Danny

1194. Texas Bug Catchers --- Any Recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Tony Hackenberg <mehawh@earthlink.net>
Message-ID: <n1Cq5.3546$p5.107977@newsread03.prod.itd.earthlink.net>
Source record: 181664

I'm thinking about purchasing a "Texas BugCatcher" antenna from GLA Systems for mobile work. Yet, I have not heard much discussion about them in this newsgroup. Any recommendations or advice on BugCatchers?

Since you can mix & match the basic components of a BugCatcher antenna, GLA's order form and web page (http://www.texasbugcatcher.com) are complicated. Adding to the complexity, many of the components come in differing sizes to better tailor them to your needs. I'm planning on using the BugCatcher on my Ford F-250 (1989) truck. I want to work 80-10 meters mobile. I've scoped out the following tentative list of components for the BugCatcher antenna:

Model - GLA Systems' Texas BugCatcher Antenna (non-remote tune; not motorized)
Mount - "Fold-over Trailer Hitch Mount" ($95)
Quick-Disconnects - QOL (Long Base Screw-Off) ($32)
Matching Coil - HD80 ($35)
Mast - 5' ($38)
Quick-Disconnects - QOM (Short Base Screw Off) ($30)
Loading Coil - #480 Coil ($139)
Extender Mast - Short Mast before Hat ($?)
Capacity Hat - 6 inch diameter ($20)
Quick-Disconnects - QOS (Small Screw-Off for Whip) ($20)
Whip - 72" (6' - 3/16" x 102") ($18)
Extra Coil Tap Kit - Spare coil taps etc ($12)

Tony Hackenberg WA8SSQ

1195. Anyone using Strand Vise for tower guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8oerq4$f7n$1@bob.news.rcn.net>
Source record: 181665

I have a source for Strand Vice and telephone style guy rods with mushroom caps.

Has anyone used or have heard any pros or cons regarding the use of Strand Vices in
lieu of cable clamps to terminate the ends of the guy wires? It seem strange I don't see
these products being used on towers--just utility poles. Any reason for this? I am
considering using the Strand Vices on my new Rohn 25G foldover tower next year.

Peter

1196. Re: Butternut HF6V Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: dave <elbc@pivot.net>
Message-ID: <967506681.1614546731@news.pivot.net>
Source record: 181666

On Mon, 21 Aug 2000, Duane Smith wrote:
>On Sun, 20 Aug 2000 05:35:59 GMT, Duane Smith <jwbest@earthlink.net>
>wrote:
>Thanks to all who answered my reqest. Next question; will a 63 pf
>cap work? I can buy that for $2 or the B'nut version for $28.
>
>>The 40 meter capacitor on my HF6V is broken. Does Butternut
>>have a web page? Anyone know the value of the capacitor? I would
>>even take one off of a junked Butternut. Thanks for any help.
>>
>>Jim N7CLV
>>jwbest@earthlink.net

Hi Jim,

Yes they have one at the following http://www.bencher.com/radioequip.asp
Butternut was bought out by bencher some years ago. but think they still carry
most of the parts

hope this helps ,
73 Dave Kc1di

1197. Re: Anyone using Strand Vise for tower guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Oh Yeah! <maps75@pvtnetworks.net>
Message-ID: <sqlvpom7t91114@corp.supernews.com>
Source record: 181667

Peter:

There is good reason that you don't see them used
on towers to a
extent. That being that they are good for one
wrap-up when you
undo them the "grit" that holds the galvanized
stranded guy wire for
utility pole use is gone; get another guy wrap.
Now they could be used
quite successfully on guys where you put strain
insulators, but down
at the bottom where you might be re-tensioning the
cable, go for
thimbles and cable clamps. Al Piper; Central
Valley Electric Co-op
Inc. Just a chicken bander, but with two towers on
his place.

"Peter Bertini" <commquart@erols.com> wrote in
message news:8oerq4$f7n$1@bob.news.rcn.net...
> I have a source for Strand Vice and telephone
style guy rods with mushroom
> caps.
>
> Has anyone used or have heard any pros or cons
regarding the use of Strand
> Vices in
> lieu of cable clamps to terminate the ends of
the guy wires? It seem
> strange I don't see
> these products being used on towers--just
utility poles. Any reason for
> this? I am
> considering using the Strand Vices on my new
Rohn 25G foldover tower next
> year.
>
> Peter
>
>
>

1198. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:00:00 UTC
From: Oh Yeah! <maps75@pvtnetworks.net>
Message-ID: <sqm1ouamt9179@corp.supernews.com>
Source record: 181668

Tom:

There is one more very important difference: Q the
open
air large coil type antenna is VERY broad banded.
While
the 'ole 1/4 whip is acceptable, if you strictly
run the normal
40 channel spectrum and do no free-banding. Two: I
personally have ran a swr bridge in-place for
years and
after resonatanting a 108" whip and getting it
flat at the
particular freq. range that you use (I run SSB
exclusively,
so I want it flat at 27.365>), set the swr bridge
standing
still and then go mobile and watch the swr go up
as the
antenna leans back in the wind. I've used the 'ole
fishing
line and plastic tab with gutter clip method of
guying the
whip, but who wants to go to that trouble and make
the
car look funky. I currently run a Hustler MO-1
with the
RMS-11 resonator on my wife's car. I run a Workman
Terminator twin external coil on my P.O. They are
both
very broad banded to the tune of 20+ above and
below
the band edges with an 1.3-1 swr. But I'm just a
dumb
chicken bander with 26 years experience and 3
copies
of the ARRL antenna handbook '56 - '74 & '99, but
I
probably don't know enough to be called a newbie.
"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39a9a7f8.14301257@news.akorn.net...
> On Mon, 28 Aug 2000 00:07:55 +0100, "Reg
Edwards"
> <g4fgq.regp@btinternet.com> wrote:

>
> >There's no noticeable difference between any of
them. Just
> >put up the most simple and least expensive - a
quarterwave
> >vertical and be done with it.
> >----
> >Reg
>
> Actually there is a difference Reg. Some CB
antenna manufacturers wind
> so much wire on the fiberglass whip that is
actuall develops out-of-
> phase current areas.
>
> That places a null at ground level, and most
other angles. It also
> adds needless resistive losses.
>
> CBers buy the antennas, because they "have more
wire inside".
>
> They remind me of fractal antennas.
>
> 73 Tom

1199. Re: PCR-100

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 00:39:02 UTC
From: "George , W5YR" <w5yr@att.net>
Message-ID: <39A9B493.B0EC1AF0@att.net>
Source record: 181709
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Patricia Gibbons wrote:

> great performance for the money, and
> it has lots of selectable filter choices..

Could you elaborate in this? My PCR-1000 has several *modes* but darned few filters. In fact, it is broad as a barn door on SSB and CW - too much so to be an effective receiver for other than casual monitoring. Just no room in that little box for any real filters and the DSP add-on doesn't offer much more.

I got one of the early ones, so maybe Icom has improved the design.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

1200. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 01:16:13 UTC
From: claudia <claudia@nospam.com>
Message-ID: <39A9BD5B.81F46F4F@nospam.com>
Source record: 181710

Hi,

You can build a 2m antenna called the half square for under $ 5.00 while
you are waiting for the radio to arrive !

http://www.cebik.com/

click on technicals and then page down to half square.

It is a very good antenna and if you want to you can build a
2m beam at this web site www.softcom.net/users/kd6dks/quad.html
(or for any frequency.)

good luck and 73

KG4FGN wrote:

> OK, I've ordered me a new 2 meter mobile radio, should be here next week. In
> the meantime, I have to decide what kind of antenna to get to use with it.
>
> I have looked at three that I am pondering. The first is a Yagi. Good gain
> (13db),
> but very directional from what I understand. As I recall, runs about 110 for
> the one I saw.
>
> The next is a dedicated 2 meter vertical antenna. At around 99 bucks a good
> deal and is omni-directional, and had about 6 db gain.
>
> Finally, there is the multiband discone antenna RS sells for 60 bucks. Best
> price, but since it's a multiband it is sure to have some performance
> degradation at 2m versus an antenna designed for 2m. However, when I finally
> upgrade to general I'll already have an antenna up.
>
> Most of the repeaters are north and west of my house, however there are a
> few south and east I'd like to try as well, which makes me undecided about
> the Yagi. Is it worth it to go out and spin it around when I want to make
> contacts in a different direction, or is the extra 7 db worth it?
>
> Any thoughts?
>
> Robert, KG4FGN

1201. Re: Fractal patent,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 01:17:27 UTC
From: kk5yy@arrl.net
Message-ID: <39a9bd68.334164641@nntp.mindspring.com>
Source record: 181711

On 27 Aug 2000 10:47:54 GMT, fractenna@aol.com (Fractenna) wrote:

>>Reading with great interest abt. the Fractal BUT how do you explain that for
>>a chinaman way out in china who has some info
>>from a brothers cusins mother brother in law!!!!!! ?????. Very interesting
>>because he will sell them anyway !!
>>rgds
>>SM7DTT
>
>Pirates always take risks. These include doing inadvertant (and obviously
>unauthorized)marketing for the legitimate IP holder.
>
>Ultimately, after doing the prototyping, and manufacturing and perhaps even
>shipping, they end up 'up the creek' with the pirated product sealed in some
>warehouse and ultimately destroyed. Or worse--they have some customers using
>the pirated product (while patent pending) with no follow-up source.
>
>Goodbye customer!
>
>73
>Chip N1IR

And when they challenge your patent..... Whoo Boy

1202. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 01:24:29 UTC
From: kk5yy@arrl.net
Message-ID: <39aabdc8.334260767@nntp.mindspring.com>
Source record: 181712

I have to agree with you Fracadolf reposted my email also
apparently the rules of good conduct and gentlemanly behavior
simply don't apply to Nathan the twirp.

His behavior put me to mind of a quote from the old Star Trek.
A Klingon having had just about enough of James Tiberius
Kirk lets go with,"You're a two bit tin plated dictator with
delusions of godhood". If the quote don't fit Chipper don't
wear it so often.

Sorry Chipper the bottom line is that you are a twirp and
apparently were not rased right, sue your parents.

On Sun, 27 Aug 2000 18:44:41 -0400, Wayne Grauel
<wgvideo@attglobal.net> wrote:

>I just want to address Chip and the others on the NG briefly.
>
>First, I'm relatively new, so I asked an intelligent question about what
>was fractenna, One gentleman came back with a very intelligent
>reply...one of the regulars and not one of the Fractenna group (as was
>explained), but gave me a very clear understanding of what and not who,
>a Fractenna was, and said nothing bad about him or them. this pretty
>much cleared things up for me.
>
>You will notice I didn't really post anymore about it.
>
>A week or so later I saw a link to the Fractenna site so I looked at it
>and from my perspective of not knowing a whole lot about the concept (or
>antenna theory in any great depth) , It looked fascinating. I asked
>some intelligent questions, like what holds it together under snow, ice
>(only to realize that I was looking at the little two meter version)
>
>Here is my problem right now. I seemed to have generated quite a stir
>for a simple little question and now I know why.
>
>It seems like Fractenna gets a lot of abuse from the group... and as I
>see it, any ASSHOLE who re-posts a personal (partial) email completely
>out of context deserves everything he gets. Chip, don't give me any of
>your bullshit that the email was not marked confidential. That's the
>biggest bunch of crap I've ever heard. So what are you, an engineer or
>a lawyer. If you're not a lawyer, may you should study to be one. It
>will save you a ton of money for all of the people you need to sue for
>liable and patent infringements and God knows what else.
>

>To set the record straight, I also noted that most of the people on the
>NG are way above my head in their level of engineering, and the degree
>of knowledge and theory each of you brings to the table. In other
>words. what I'm saying is You all know a heck of a lot more than I do,
>why would I judge?
>
>I truthfully thought that Fractenna was some kind of joke or someone
>posting stuff about a fractenna as a troll.
>
>From the outside looking in, it would not be hard to misjudge what one
>is reading.
>
>So, let it be clear, I have nothing against anyone out there, I was just
>asking a simple question.
>
>When you walk into this NG you see all this Fractenna stuff and all
>these posts about suing, liable, etc., etc. and you so have to wonder
>what the heck is going on because there's no threat of lawsuits, on any
>other threads as you guys discuss in great depth antenna theory.
>
>I've been on other newsgroups, and sometimes there is someone out there
>with no interest in the group (other than to stir up trouble) making all
>kinds of ridiculous statements and antagonizing the others in the
>group. these people are called trolls.
>
>This is how it started... I loffed into the NG and rather than take
>about 1250 posts, I selected 100. After downloading a hundred topics
>guess what I was... HUGE threads with all these posts and people yelling
>and someone else out there threatening to sue everyone (not mentioning
>any names here). From my perspective it looked to me like that's what
>this guy calling himself Fractenna seemed to be doing. Keep in mind,
>this is strictly from the surface and how it appeared to me as I
>downloaded the first group of messages from the NG (yes, i was on a long
>time ago a couple of times, but there wasn't any Fractenna stuff going
>around). And obviously... this is why I asked?
>
>So, If my intentions or the nature of my question wasn't clear, I hope
>it is now. Sorry for all the trouble I've caused!
>
>Wayne
>
>Go ahead Chip... sue me!
>
>
>

1203. Re: extending range of 900mhz ss cordless phone

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 01:49:30 UTC
From: jamesrhampton@my-deja.com
Message-ID: <8ocgf5$n7i$1@nnrp1.deja.com>
Source record: 181713
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

You're forgetting something here. You MIGHT be able to modify it
legally as a licensed amateur under one condition - no one can call
in! Remember, even with the autopatch in a repeater, it may only be
controlled by a licensed amateur, therefore it is for outgoing calls
only! If you only modify the handset, you couldn't talk to an
unlicensed radio; therefore, this is going to be an outgoing unit only
since it will be a licensed amateur radio station.
73s from Rochester, NY
Jim

In article <Pine.LNX.4.10.10008252111220.23165-100000@exp.bde-
arc.ampr.org>,
kd6lvw@att.net wrote:
> Under Part 15, it is not legal to make that modification if that
results in an
> ERP greater than what the regulations allow.
>
> Under Part 97, it is proper only if you are licensed (I didn't see any
> indication of such in your post) as an amateur radio operator AND the
spread
> spectrum frequency hop algorithm that the device uses is either in
the Part 97
> rules or you have filed a statement which indicates it with your
local FCC
> office.
>
> As far as the metal plate being a ground plane, who cares? If you're
replacing
> the antenna with one that is external, a ground plane for the stock
antenna
> would not be used and is therefore irrelevant. I don't have any
other comments
> on the modification you propose.
>
> On 25 Aug 2000, CrACKeD wrote:
> > i'm seeking some advice re: extending the range of a vtech 900mhz
digital
> > spread spectrum cordless phone. my idea was to replace the stock
stubby
> > antenna attached to the base with a very short run of coax (rg-
58/u) out
> > to a tuned yagi (like a cushcraft pc906n). but when i removed the
case

> > from the base unit, ended up with a few questions. i found that the
> > antenna output from the board was as follows: antenna center
conductor
> > goes right into stubby antenna mounted to plastic case. no mystery
there.
> > but the antenna ground output was attached to a copper sheet of
metal,
> > bent at a 90 degree angle (maybe just to fit). does this metal
piece serve
> > as some sort of ground plane? when attaching the coax, should i
remove it
> > and attach the coax braid in it's place? can i even assume a 50-ohm
> > transmission line and antenna is proper here?
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1204. Four Up, Four Down

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 02:16:55 UTC
From: Brian Haren <bharen@earthlink.net>
Message-ID: <rYjq5.2224$p5.54001@newsread03.prod.itd.earthlink.net>
Source record: 181714

Got an antenna question that's been rattling around in my (admittedly mostly empty) mind for a while now...

I'm in the Army and spend a lot of time in the field, much of it communicating over various FM radios. The standard Army FM "base station" antenna is the OE 524 (the successor to the 292 to you old timers out there). This antenna has 8 elements, four pointing up in a "crown" pattern angled about 70 degrees from the hoizontal, four pointing down in the same approximate pattern. The four pointing up are, I assume, the driven elements, the four pointing down are the ground plane elements. The Army is obviously in love with this antenna; as far as I can tell it's been in use since the '60's. However, I have never seen this antenna duplicated in a civilian form. That would tell me that it's not as good a performer as it's military popularity would seem to indicate.

Can anyone tell me what the theoretical performance of this antenna arrangement is and why it's so popular with the military and not the civilian market?

73!
Brian
KC5YNP

1205. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 02:53:33 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39A9C731.68232DA4@GTE.net>
Source record: 181715

KG4FGN wrote:

> OK, I've ordered me a new 2 meter mobile radio, should be here next week. In
> the meantime, I have to decide what kind of antenna to get to use with it.
>
> I have looked at three that I am pondering. The first is a Yagi. Good gain
> (13db),
> but very directional from what I understand. As I recall, runs about 110 for
> the one I saw.
>
> The next is a dedicated 2 meter vertical antenna. At around 99 bucks a good
> deal and is omni-directional, and had about 6 db gain.
>
> Finally, there is the multiband discone antenna RS sells for 60 bucks. Best
> price, but since it's a multiband it is sure to have some performance
> degradation at 2m versus an antenna designed for 2m. However, when I finally
> upgrade to general I'll already have an antenna up.
>
> Most of the repeaters are north and west of my house, however there are a
> few south and east I'd like to try as well, which makes me undecided about
> the Yagi. Is it worth it to go out and spin it around when I want to make
> contacts in a different direction, or is the extra 7 db worth it?
>
> Any thoughts?
>
> Robert, KG4FGN

Hi Robert,

The R.S. discone's wideband characteristics end around 120 MHz. The 30-50 coverage is achieved as a groundplane and is very narrow band- this antenna will not give you frequency coverage at HF- which is what I think you are referring to w/ your upcoming general class license.

Dale W4OP

1206. WTB - M2 440-18

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 03:39:05 UTC
From: jmr <jmroden@atdial.net>
Message-ID: <39A9DF73.877F9F34@atdial.net>
Source record: 181716

Looking for a M2 440-18. E-mail with particulars.

Mike - k7jr@arrl.net - Bulverde TX

1207. High Sierra antenna on apt. roof question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 04:01:12 UTC
From: n9yln@aol.com
Message-ID: <20000828000112.04205.00000098@ng-fw1.aol.com>
Source record: 181717

We would like to use a High Sierra HS-1500MKII on the roof of the apartment where we live. Has anyone done this? How was the installation done? Is a counterpoise needed? Please email me direct at: N9YLN@aol.com
Any help would be greatly appreciated!!
73,
Renee

1208. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 06:20:13 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <xwnq5.2292$V67.83745@newshog.newsread.com>
Source record: 181718

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"KG4FGN" <kg4fgn@mindspring.com> wrote in message
news:8oc3ch$m67$1@slb6.atl.mindspring.net...
> OK, I've ordered me a new 2 meter mobile radio, should be here next week.
In
> the meantime, I have to decide what kind of antenna to get to use with it.
>
> I have looked at three that I am pondering. The first is a Yagi. Good gain
> (13db),
> but very directional from what I understand. As I recall, runs about 110
for
> the one I saw.

Yagis work fine, but unless you are out on the great plains the usually are
not necessary to work repeaters.

Another thought is that if you are going to be working repeaters and there
are lots of them in your area you don't want a "high" antenna.
I moved mine down so the base is abut level with the bottom of the eves and
the peak of the roof is at least half way up the length of the antenna as I
hear Battle Creek all the time, but they are a tad close.

>
> The next is a dedicated 2 meter vertical antenna. At around 99 bucks a
good
> deal and is omni-directional, and had about 6 db gain.
>
> Finally, there is the multiband discone antenna RS sells for 60 bucks.
Best
> price, but since it's a multiband it is sure to have some performance
> degradation at 2m versus an antenna designed for 2m.

When working repeaters performance is "usually" no big thing. Your maximum
distance for normal propagation is about 13% beyond the distance to the
horizon. That does not take a great deal of power, or gain.

However, when I finally
> upgrade to general I'll already have an antenna up.
>
> Most of the repeaters are north and west of my house, however there are a
> few south and east I'd like to try as well, which makes me undecided about
> the Yagi. Is it worth it to go out and spin it around when I want to make
> contacts in a different direction, or is the extra 7 db worth it?
>

Depends on the distance to the repeaters and the distance to the next closest on the same frequencies. If one is 20 miles in one direction and the other is 105 (if they stick to the 125 mile rule) you will be keying both with anything other than a relatively low antenna and power. Here the Yagi might help though as it *might* reduce the signal off the back enough that you wouldn't key the repeater in that direction.

I say that power and gain are not important as I can easily work 150 plus miles from the airplane using 5 watts or less and a rubber duck antenna. That is from well less than 10,000 feet.

Roger (K8RI)

> Any thoughts?
>
> Robert, KG4FGN
>
>
>
>

1209. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-28 06:38:08 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AA08D0.AA076D39@oio.net>
Source record: 181619

Roy,
It's a matter of courtesy, like holding a door for someone.
Some people do it, some don't. All I can say is that the
courtesy that you show to others reflects on ~you~, not the
other person. If you treat people on the NGs as you do in
person, I don't see how you can go wrong. At least it won't
be you who is discourteous.
'Doc

1210. Field Strength Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Scott Mann <mann@uq.net.au>
Message-ID: <8oft15imu1@bunyip.cc.uq.edu.au>
Source record: 181540

How does the circuit at
http://www.mitedu.freeserve.co.uk/Circuits/RF/sfsm.htm
work and what principles does it take advantage of.

In particular what does the capactior do in the circuit?

I am using in in conjunction with the circuit located at
http://www.pc.clara.net/radio/index2.htm

1211. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000829045334.29438.00000676@ng-ff1.aol.com>
Source record: 181541

>And so... advice to those who would communicate with Fractenna, should be to
>do so only with restraint and caution.
>
> Peter K1PO

....as opposed to lies, and distortions, and libel, I think your suggestion is the first RATIONAL thing you've said in months!

A more apt way to word your suggestion is:

"advice to those who communicate with Fractenna,be polite and accurate and on topic".

What a most pleasant change that would be, for Peter and a minority of other troublemakers.

I don't care what motivates the appropriate restraint--but for most it's obviously WORKING! And what a refreshing change that is!

73
Chip N1IR

1212. Doublets and Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: bejones@hursley.ibm.com
Message-ID: <39ab888a.8139514@testnews.hursley.ibm.com>
Source record: 181542

For IARU region 1 field day this weekend I'd like to use a 160' doublet fed by 450ohm balanced line. I've used this before with reasonable success. Sadly I doubt we'll get it much over 30' high unless the trees have grown and our catapultist is on particularly good form.

The problem is my local club members are not contesters and many of them not particularly experienced operators. Many of them will be unfamiliar with the equipment and some may not even have used a manual ATU before. To simplify matters I intend to use the ladder line all the way except for the last 8or9' into the caravan. Here I'll stick a 4-1 balun (I got a RadioWorks 4-1 current balun) and feed 50 ohm coax - not only does this mean the TS850SAT built in ATU might be able to match the antenna but also keeps the balanced line at a little distance from the aluminium bodied caravan.

Questions:

Is the TS850 built in ATU likely to provide a reasonable match on all bands in this configuration?

Any better ideas for multiband 80-10m operation?

Sadly my tiny home garden doesn't lend itself too well to antenna experimentation so I can't test this out empirically.

Brian G0UKB

Brian Jones
Java Technology Centre
IBM Hursley Park
England

1213. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AB979B.180AF024@eznec.com>
Source record: 181543

I did a quick EZNEC modeling experiment. I made an 8-sided cylinder (that is, like a cylinder but with octagonal ends and 8 flat sides). The cylinder was 5 feet in diameter and 5 feet high. Its bottom was 1 foot above the ground. The cylinder was modeled as a skeleton, with 8 radial wires and 8 periphery wires making the top and bottom faces, then 8 vertical wires connecting the top and bottom faces. At the center of the top of the cylinder I put a five foot vertical wire, fed at its base. So what I had was a dipole, with the upper half normal sized (#10), and the lower half being 5 feet in diameter. All wires in the model were #10, frequency was 3.5 MHz, and "Real, High-Accuracy" ground of average characteristics was used.

The current on the cylinder began at the feedpoint at the center of the top face, then went to the edge of the top, downward along the vertical wires to the bottom face. Some, but not much, current, flowed from the edge of the bottom face to its center.

The current on the whip was as expected -- it tapered linearly from the bottom to the top. On the sides of the cylinder (that is, the vertical wires), I expected a fairly uniform current due to the "bottom loading" effect of the bottom face. But the current did decrease from the top of the cylinder to the bottom along the vertical wires. The decrease was approximately linear. But it was only about a 2:1 ratio. That is, the current on the vertical wires was about twice as large at the top of the cylinder as at the bottom, and there's quite a bit of current flowing onto the periphery wires at the bottom cylinder face. I took the approximate average current in one of the vertical cylinder wires and multiplied by eight to get the total current along the vertical wires. The result was 0.4 amps, not too far off from the 0.5 amps average for the whip (which was fed with 1 amp at its base).

I replaced the cylinder with five feet of #10 wire. The current on the whip was essentially the same as it was before, so the field from the whip was the same as before. The total field from the antenna was only slightly changed, being 0.45 dB lower than with the cylinder. If the field is about the same as before and the field from the whip is the same as before, then the field from the cylinder must be about the same as the field from the 5 foot wire I substituted for it.

The cylinder is admittedly a very crude and idealized model for a car. But it does illustrate what I had proposed earlier -- that the car can indeed be a significant radiator -- at least if the whip is placed at the center of its top. Top loading of the whip will certainly alter the current distribution on the whip, and perhaps also on the car, so the ratio of radiation from each will be affected by the loading. Also,

placement of the whip on one end of the car should result in some non-cancelling horizontal currents, which would be expected to incur quite a bit of loss due to coupling with the ground, and would radiate mostly straight up with what field is left. It's admittedly a complex issue, but I think some modeling of simplified cases can give some insight into what's happening.

Roy Lewallen, W7EL

1214. Re: Field Strength Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AB9A88.F30887FD@oio.net>
Source record: 181544

Scott Mann wrote:
>
> How does the circuit at
> http://www.mitedu.freeserve.co.uk/Circuits/RF/sfsm.htm
> work and what principles does it take advantage of.
>
> In particular what does the capactior do in the circuit?
>
> I am using in in conjunction with the circuit located at
> http://www.pc.clara.net/radio/index2.htm

It by-passes AC around the VOM.
'Doc

1215. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Jesper Wolf Jespersen <jwj@ehuset.com>
Message-ID: <l1Nq5.170$nU.2333@news.get2net.dk>
Source record: 181545

Hello all.

Thank you for the nice replies to my query.

The sugestions have varied, most agree that steel wire was not such a great choise after all.

But only one adresses my problem, that I cannot tune up on 15 metres.

He sugests that the combination of dipoles for the 40 and 20 metres band may have a problem on 15 metres.

But I think I have seen excactly this setup sugested in this conference and in amateur magazines.

The 20 m dipole is about 1/3 wavelength on 15 metres and shouldn't be a problem if it stays well away from the 40 m dipole which is at 3/4 wavelengths on 15 metres.

I will try and shorten the 20 m dipole to a 10 m dipole and maybe even remove it to make sure what the problem is, one never knows when reality choses to defy theori :-)

Greetings from Denmark

Jesper Wolf Jespersen

OZ8ACE

1216. Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <S5Nq5.1407$l63.2144@newsfeed.slurp.net>
Source record: 181546

From somewhere in his poison ivy league ivory tower, chip-schtik has added classes in 'psychiatric evaluation', 'persuasive speech', and 'Miss Manners' to his attempts to bring culture to us irrational, inapt, boorish, and unrestrained
troublemakers.

Look here, candyass, the restraint is entirely exercised by the rest of us (to whom I apologize for this lapse in restraint) in not replying to your tiresome screeds and trolls.

Go refresh yourself by playing in your own sandbox-dot.com, for a change, with the minority of other children who, like you, should not be seen nor heard.

K3BHJ
****
>And so... advice to those who would communicate with Fractenna, should be to
>do so only with restraint and caution.
>
> Peter K1PO

....as opposed to lies, and distortions, and libel, I think your suggestion is
the first RATIONAL thing you've said in months!

A more apt way to word your suggestion is:

"advice to those who communicate with Fractenna,be polite and accurate and on
topic".

What a most pleasant change that would be, for Peter and a minority of other troublemakers.

I don't care what motivates the appropriate restraint--but for most it's obviously WORKING! And what a refreshing change that is!

73
Chip N1IR

1217. electric fence noise :(

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: KE4QJK <ke4qjk@qsl.net>
Message-ID: <0zNq5.1982$gl4.483136@news2.mia>
Source record: 181547

Recently TWO neighbors installed electric fence on their property. The fences create a LOT of noise on HF, in fact it has made listening quite difficult.

Anybody have ideas on how to get rid of that kind of background noise? The NB on this radio is mediocre at best, DSP is about the same!

rig: IC-706MKIIG
antenna: 50' dipole
proximity to fence: 150'

Thanks,
Vic KE4QJK

1218. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39aba255.5579004@news.akorn.net>
Source record: 181548

Hi Roy,

Good to see a model.

On Tue, 29 Aug 2000 03:59:39 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>The cylinder is admittedly a very crude and idealized model for a car.
>But it does illustrate what I had proposed earlier -- that the car can
>indeed be a significant radiator -- at least if the whip is placed at
>the center of its top.

I hope no one jumps to the conclusion that "significant radiator"
means the car adds a significant high-angle signal to the radiation.
That is the point that most people seem to misunderstand. I think that
misunderstanding is rooted in claims made by Don Johnson and others
that "significant high angle radiation" occurs from the vehicle.

Of couse "significant" is a subjective term.

I wonder how the car would compare to a flat sheet about the same area
as a slice of the car that would involve the upper areas of
sheetmetal.

>ratio of radiation from each will be affected by the loading. Also,
>placement of the whip on one end of the car should result in some
>non-cancelling horizontal currents, which would be expected to incur
>quite a bit of loss due to coupling with the ground, and would radiate
>mostly straight up with what field is left.

That's a reasonable way to say it, as long as people pay attention to
words like "some" , "quite a bit of loss" and "what field is left".

Several months back on this newsgroup someone claimed the shootouts
in California were "mostly measuring radiation from the vehicles, and
not the antennas".

Most cars are around 5 feet tall, and 12 feet long, and six feet wide.
They have considerably more horizontal area than height. An exception
would be something like a van. It seems reasonable the longer lengths
of antenna with current flowing straight up would be much better
radiators than the vehicle.

I've e-mailed Cecil because I think he was the one with the model of
his vehicle.

73 Tom

1219. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000829080626.01177.00000828@ng-cb1.aol.com>
Source record: 181549

>From somewhere in his poison ivy league ivory tower, chip-schtik has added
>classes in 'psychiatric evaluation', 'persuasive speech', and 'Miss Manners'
>to his attempts to bring culture to us irrational, inapt, boorish, and
>unrestrained
>troublemakers.
>
>Look here, candyass, the restraint is entirely exercised by the rest of us
>(to whom I apologize for this lapse in restraint) in not replying to your
>tiresome screeds and trolls.
>
>Go refresh yourself by playing in your own sandbox-dot.com, for a change,
>with the minority of other children who, like you, should not be seen nor
>heard.
>
>K3BHJ
>**************************************
>>And so... advice to those who would communicate with Fractenna, should be
>to
>>do so only with restraint and caution.
>>
>> Peter K1PO
>
>....as opposed to lies, and distortions, and libel, I think your suggestion
>is
>the first RATIONAL thing you've said in months!
>
>A more apt way to word your suggestion is:
>
>"advice to those who communicate with Fractenna,be polite and accurate and
>on
>topic".
>
>What a most pleasant change that would be, for Peter and a minority of other
>troublemakers.
>
>I don't care what motivates the appropriate restraint--but for most it's
>obviously WORKING! And what a refreshing change that is!
>
>73
>Chip N1IR
>

David,

Whatever works for you in exercising restraint has a practical and beneficial outcome, where people don't need to fear the ridicule and intimidation of abusive discussions, and instead can engage in objective discourse. So even if your MOTIVATIONS are incorrect, let the RESULT continue.

I have made very positive moves to reach out to those who are crying for my attention and have felt compelled to abuse, to see if a personal touch helps. For example, I offered to meet and take Chuck O'Neal , K1KW, out to lunch at Boxboro the other day, with no response.

I will add that should offendors , such as yourself, behave yourselves, I may be willing to continue answering fractal antenna questions on this NG.

As of now, I only answer such questions on the fractal antenna reflector:

fractalantenna-subscribe@egroups.com

Have nice day!

very 73,
Chip
N1IR

1220. Re: Doublets and Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Fernblatt <badger@telalink.net>
Message-ID: <NINq5.2152$pJ.33676@news2.atl>
Source record: 181550

Brian Jones <bejones@hursley.ibm.com> wrote in message
> For IARU region 1 field day this weekend I'd like to use a 160'
> doublet fed by 450ohm balanced line. I've used this before with
[snip]
>
> Questions:
>
> Is the TS850 built in ATU likely to provide a reasonable match on all
> bands in this configuration?
>

Unfortunately not. The ATU in most tranceivers is not designed to match
"untuned" antennas, only to "flatten" the SWR your tranceiver sees on
antennas
that are already resonant.

> Any better ideas for multiband 80-10m operation?

A G5RV would probably work well, and the ATU in the TS-850
should be able to match it fairly well.

Tom KA4RKT
Manchester, TN USA

1221. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Diamond Dave <bbscornerSPAMBLOCK@juno.com>
Message-ID: <CairOU7hPbwCz9IbFl40PTN3kUkJ@4ax.com>
Source record: 181551
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Everyone who has responded to this thread has mentioned the internal RF frequency (IF) in most radio receivers, including pagers and walkmans.

But, is your pager a two-way pager? In that case, it is actually transmitting information.

As also mentioned, most electronic devices emit RF. Ever put an AM radio next to your computer? You're getting a boatload of RF energy from not only your computer, but the monitor as well.

If you don't like being hit with RF energy, you're almost out of luck these days in our modern society.

But if you move to some place without these modern devices, you'll still be hit by cosmic rays from outer space!

Dave Perusel
Webmaster - Telephone World
http://phworld.tal-on.com

On Sat, 26 Aug 2000 22:46:22 +0800, "Dan Jacobson"
<jidanni@kimo.FiXcomTHiS.tw> wrote:

>Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
>walkman listening to an AM station gets close to it, I hear a
>OoooOoooOoooOooo sound, indication that it is somehow putting out radio
>signals. I thought pagers, like walkmans, just received signals, not
>emitting... Would a pager then be supposedly more worrisome healthwise
>than a walkman when close to the body all day? But if I were to put it in
>my backpack to be away from the body, I could not be alerted in noisy
>environments or at meetings, both of which I use the vibration alert
>selection for.

1222. Re: electric fence noise :(

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000829084020.27115.00000476@ng-cd1.aol.com>
Source record: 181552

Hi Vic--

Fist thing, I guess, is to get a portable radio (a HT with the airband should work pretty well--need an AM detector--and noise is a little easier to localize at VHF). Then start walking the fences--could be one is a lot worse than the others. Causes could be grass or branches touching the wires, poorly made splices, cracked or dirty insulators, gate connections, or anything else that might draw a spark. Some older units may be noisy, too. When the fence is installed and working properly, there should be little or no noise from it. If the fence is really noisy, it may be a sign that it isn't working as well as it should and the farmer may have a vested interest in fixing it.

Rick K1BQT

1223. Re: Dovetron Stealth

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <39abbb20$0$51207$7aa13262@news.net-link.net>
Source record: 181553

I called the number in his advert a few years ago and the guy faxed me some info. It looked fishey to me and I faxed some questions back to him. Never got an answer from the Dovetron Steath to questions such as how his antenna performs in relation to a dipole at 30 feet. Needless to say I did NOT get one. If you need stealth, you would likely be better off tacking a loop on the wall or ceiling and using a coupler such as SGC-230 or putting up a flagpole or a dipole in the attic. Inverted L along roof edge may work also. I don't think putting RF on the house AC wiring is the way to go! That Dovetron thing was very expensive also!
Albert Alvareztorres, Jr. > wrote in message ...
>Is anyone using the Dovetron Stealth, is it any good?
>
>--
>
>Al, AA1DO
>
>
>
>

1224. Re: Doublets and Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39ABC7CE.9C9A4176@wb6hqk.ampr.org>
Source record: 181554

Brian Jones wrote:
>
> For IARU region 1 field day this weekend I'd like to use a 160'
> doublet fed by 450ohm balanced line. I've used this before with
> reasonable success. Sadly I doubt we'll get it much over 30' high
> unless the trees have grown and our catapultist is on particularly
> good form.
>
> The problem is my local club members are not contesters and many of
> them not particularly experienced operators. Many of them will be
> unfamiliar with the equipment and some may not even have used a manual
> ATU before. To simplify matters I intend to use the ladder line all
> the way except for the last 8or9' into the caravan. Here I'll stick a
> 4-1 balun (I got a RadioWorks 4-1 current balun) and feed 50 ohm coax
> - not only does this mean the TS850SAT built in ATU might be able to
> match the antenna but also keeps the balanced line at a little
> distance from the aluminium bodied caravan.
>
> Questions:
>
> Is the TS850 built in ATU likely to provide a reasonable match on all
> bands in this configuration?

No. I am not familiar specifically with the ATU in the TS-850 but most
of the built in autotuners are pretty well guaranteed to match an VSWR
of 3:1 at any phase angle and maybe 5:1 at some phase angles.

The beauty of feeding simple wire antennas with 450 ohm balanced
transmission line is that the VSWR on the transmission line rarely
exceeds 10:1 for a typical resonant wire antenna. For example, at 1/2
wl resonance, the feed impedance will be around 50 ohms giving a VSWR of
9:1. At 1 wl resonance (so called antiresonance) the impedance is
difficult to estimate but probably less than 5000 ohms giving a VSWR of
11:1. Off resonance the VSWR can be higher than 10:1 but usually not.

Ideally, a 9:1 transformer would result in the VSWR on the 50 ohm coax
staying within the same maximum VSWR. Unfortunately, the ATU in the
transceiver lacks sufficient tuning range and may be damaged if tuning
into a very low impedance is attempted.

> Any better ideas for multiband 80-10m operation?

Consider the so called Maypole consisting of multiple 1/2 wl dipoles
radiating from a common feedpoint. The dipoles are in parallel
electrically and ideally connected to a current balun at the feedpoint.
The system is coax fed and with a little straightforward pruning can

easily be accommodated by the ATU on all bands which have elements.
Usually the 40 m element works ok on 15m if you are not too concerned
about the radiation pattern.

bart
wb6hqk

1225. Re: electric fence noise :(

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20000829102725.27826.00000911@ng-cb1.aol.com>
Source record: 181555

<<Recently TWO neighbors installed electric fence on their property. The fences create a LOT of noise on HF, in fact it has made listening quite difficult.>>

Ed Hare W1RFI did an article about your problem. It has all of the information that you need. I know that you can access the article at
http://www.arrl.org
Find the "TISFIND" & look up his callsign & electric fence(You will find a neat electric fence antenna).
If you cant find it, I can just scan it & E-mail it to you.
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

1226. Re: Antenna Wire Material

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39ABD0E4.E3F@wt.net>
Source record: 181556

Jesper Wolf Jespersen wrote:
>

>
> But I think I have seen excactly this setup sugested in this conference and
> in amateur magazines.
>
> The 20 m dipole is about 1/3 wavelength on 15 metres and shouldn't be a
> problem if it stays well away from the 40 m dipole which is at 3/4
> wavelengths on 15 metres.
>
> I will try and shorten the 20 m dipole to a 10 m dipole and maybe even
> remove it to make sure what the problem is, one never knows when reality
> choses to defy theori :-)
>
> Greetings from Denmark
>
> Jesper Wolf Jespersen
>
> OZ8ACE

You are likely just showing a bit of coupling between the 40 and 20
legs. Maybe spread them apart a bit farther. If you have a small tuner
you could just use it to get a better match on 15. The feed impedance
will be fairly low, and the loss fairly small. If I had a tuner around I
would use it instead of trying to tweak the wires to work 15 better. I
doubt you would notice the difference on the air between using a tuner
and not using one for that band. MK
--
http://web.wt.net/~nm5k

1227. Re: electric fence noise :(

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39ABD9E1.96E11DF5@oio.net>
Source record: 181557

KE4QJK wrote:
>
> Recently TWO neighbors installed electric fence on their property. The
> fences create a LOT of noise on HF, in fact it has made listening quite
> difficult.
>
> Anybody have ideas on how to get rid of that kind of background noise? The
> NB on this radio is mediocre at best, DSP is about the same!
>
> rig: IC-706MKIIG
> antenna: 50' dipole
> proximity to fence: 150'
>
> Thanks,
> Vic KE4QJK

Start by checking if there is any grass touching the fence. If so,
trimming the grass will stop a lot of the irregular noise pulses. An
electric fence operating correctly, will be a regular pulsing noise.
Diplomacy works lots better than your other recourses. Also might
tell the owners that the noise the fence produces is wasted
electricity
so that it would be in their favor to make sure the fence is working
correctly...
'Doc

1228. Re: Doublets and Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39ABDC22.56842C6A@oio.net>
Source record: 181558

Brian,
The 850's tuner may or may not tune the antenna. I wouldn't
count on it. Some bands are going to be out of range for the
ATU. The manual tuner is probably going to be your best bet.
About the balun. The 4:1 should work fine. So should any
of the other ratios. The actual impedance of the antenna system
is not going to be close to 450 ohms, except by accident.
Ladder-line/open-wire feed lines really aren't that 'touchy',
bringing it into the caravan through a window should work as well
as using the balun and coax feed line. No idea if it would be
any 'better' than how you plan to do it though.
Good luck...
'Doc

1229. Re: electric fence noise :(

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <39ABDF47.C6831F1A@NO.excite.SPAM.com>
Source record: 181559

I addition to K1BQT, let the farmer know their is a problem first and give him what you think it might be and it is unlikely he will have to invest in a new controller. Let him know you are willing to try to isolate the problems spots and work with him in correcting them. You are more likely to know how to make a connection electrically more secure than he might think might be necessary. If it weeds, let him know it is just as eerily for you to pull them if it a small isolate spot. A little good will should bring a more favorable response. But you don't just want to trespass on his property and then call him with all of the problems he needs to resolve. If he basically say get lost, write him a simple direct letter that their is a problem and if he reviews the documentation on the controller that he is responsible and you are still willing to work with him to find the problem(s) to help resolve them. If this does not work, send a formal complaint to the FCC with what you have done so far and cc him. If you get to this point, you also may want to give the local police/sheriff a heads up about the problem and that you have not entered his property and will not unless invited to circumvent a false trespassing complaint and are only trying to work in the spirit of cooperation.

1230. Re: Field Strength Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39abde4d.452720@news.seanet.com>
Source record: 181560

On Tue, 29 Aug 2000 18:42:31 +1000, "Scott Mann" <mann@uq.net.au>
wrote:

>How does the circuit at
>http://www.mitedu.freeserve.co.uk/Circuits/RF/sfsm.htm
>work and what principles does it take advantage of.
>
>In particular what does the capactior do in the circuit?
>
>I am using in in conjunction with the circuit located at
>http://www.pc.clara.net/radio/index2.htm
>

Hi Scott,

The capacitor is the heart of the indicator circuit. It holds the rectified over the air signal while the multi-meter presents the reading of voltage as an indication of the field strength.

I presume you mean to use the FSM to measure the effective output of the AM transmitter. You should only need to increase the inductance of the inductor L1 in the FSM to roughly the same value as the component T1 in the transmitter. This is not a strict requirement however as the current FSM design may have enough sensitivity to work for you anyway (but it would work a whole lot better with more windings in L1). The reason for this difference is that the two circuits operate at vastly different frequencies. Even so, at close proximity (within 20 feet), this shouldn't matter.

73's
Richard Clark, KB7QHC

1231. Receiving antenna question re 'matching' random wire.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39ABE65C.C72C627@roadrunner.nf.net>
Source record: 181561

I've erected a random approx. 60 foot wire for short wave; receiving only. It's about 25 feet high and as clear of buildings and overhead utility wires as I can make it.

The wire material appears to be plated steel. What it actually is is the support wire/strand from a scrapped length of cable TV coax! We just peeled it away from the coax complete with its insulating plastic covering. It's light, strong and relatively inconspicuous.

This antenna will have many different impedances at various frequencies? I would like to use a coax lead in to my basement shop to minimize electrical RFI so I propose to use a Hi/Lo untuned matching device.

I propose this:
Provide an untuned inductance/coil between the antenna wire and ground, outside where it connects to the coax. I propose two taps on the untuned coil; one at say 10% of turns to give a 100:1 impedance match the other near the 'top end' of the coil for those frequencies where the antenna has a relatively low impedance. There will be a remotely controlled switch or relay to switch the centre conductor of the coax between the two taps. I will probably use some RG8 or RG58 for the approx. 40 foot lead in and connect it to the balanced doublet terminals of my receiver rather than the high impedance capacity coupled 'open antenna terminal'.

This, I guess, would be called an aperiodic (untuned) auto transformer. I first saw reference to 'aperiodic transformer' in "Practical Radio Communication." McGraw Hill, 1943. In fact such an arrangement with a fixed low impedance tap is shown in the text with wording "A standard antenna-coupling transformer is used .....".

The single coil will also incidentally keep the antenna grounded; for safety, as recommended for transmitting antenna and or for static discharge. Not that lightening is much of a problem here.

BTW I have exchanged emails regarding using using steel cored clothes line as an antenna, with a ham who is in Scotland!. His application is the relatively narrow bands of frequencies for each amateur band; whereas mine is for receiving all shortwave frequencies.

Any comments/suggestions please.

Regards. Terry S.

1232. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39ABEEEB.D18C4AC0@eznec.com>
Source record: 181562

In my model, the horizontal components pretty much cancel out, so there's no significant horizontal component. As I mentioned, assymetrical mounting would produce an uncancelled horizontal component, but it would be close to the ground, so would be the source of substantial loss, and would radiate a relatively small amount, mostly straight up. I haven't confirmed this by modeling or measurement, though.

It looks to me like a 5 foot high vehicle will radiate as much as a 5 foot vertical wire with some top loading (as much top loading as required to get about a 2:1 current ratio at the ends), provided that the antenna is placed at the center of the top of the roof. Likewise, a 6 foot high vehicle will radiate as much as a 6 foot wire, and so forth. I believe this would be true regardless of the relative width of the vehicle.

Roy Lewallen, W7EL

Tom W8JI wrote:
>
> Hi Roy,
>
> Good to see a model.
>
> On Tue, 29 Aug 2000 03:59:39 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >The cylinder is admittedly a very crude and idealized model for a car.
> >But it does illustrate what I had proposed earlier -- that the car can
> >indeed be a significant radiator -- at least if the whip is placed at
> >the center of its top.
>
> I hope no one jumps to the conclusion that "significant radiator"
> means the car adds a significant high-angle signal to the radiation.
> That is the point that most people seem to misunderstand. I think that
> misunderstanding is rooted in claims made by Don Johnson and others
> that "significant high angle radiation" occurs from the vehicle.
>
> Of couse "significant" is a subjective term.
>
> I wonder how the car would compare to a flat sheet about the same area
> as a slice of the car that would involve the upper areas of
> sheetmetal.
>
> >ratio of radiation from each will be affected by the loading. Also,

> >placement of the whip on one end of the car should result in some
> >non-cancelling horizontal currents, which would be expected to incur
> >quite a bit of loss due to coupling with the ground, and would radiate
> >mostly straight up with what field is left.
>
> That's a reasonable way to say it, as long as people pay attention to
> words like "some" , "quite a bit of loss" and "what field is left".
>
> Several months back on this newsgroup someone claimed the shootouts
> in California were "mostly measuring radiation from the vehicles, and
> not the antennas".
>
> Most cars are around 5 feet tall, and 12 feet long, and six feet wide.
> They have considerably more horizontal area than height. An exception
> would be something like a van. It seems reasonable the longer lengths
> of antenna with current flowing straight up would be much better
> radiators than the vehicle.
>
> I've e-mailed Cecil because I think he was the one with the model of
> his vehicle.
>
> 73 Tom

1233. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39ABEC84.E971FBC@roadrunner.nf.net>
Source record: 181563

This is a 'studied' response to the apartment antenna a question.

Is it possible to poke anything out of the window. Such as long fishing pole with metal filament line. If and ever someone complained or asked about it could you say that, " you were just 'drying it out'; why is there a problem?". Or "trying it out"!,

Of course maybe you could wind a big coil around the whole apartment, or one room and excite the whole building as one big antenna! Or could you give one end of a really, really; really fine wire (so fine, off an old transformer, that you can hardly see it) to a friendly squirrel and ask it to run up an adjacent tree? If it breaks and falls down from the window it can be attributed as being part of a fallen experimental kite that blew into town! or somesuch!

Idea!

1234. Re: A note about fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39ABECE9.1AAFA227@roadrunner.nf.net>
Source record: 181564

Whole subject much too fractious. Ignore!

1235. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39ABF4EC.1CF173AE@home.com>
Source record: 181565
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

Lizard Blizzard wrote:
>
> Mark Fergerson wrote:
>
> > > [snip]
>
> > > when I bump my wrist into something. Dammit, I wish it could be
> > > disabled completely.
>
> > You got that right. Just open the case and carefully remove the tiny
> > bit of metal that completes the circuit when you push the button. Then
> > superglue the button in place in the case. Wait for it to set
> > completely before reassembly.
>
> > Alternatively, shave/grind the button down so it won't activate
> > accidentally.
>
> I thought about grinding the button down. But I tried to 'modify' the
> rubber button on my remote control and I had one helluva time. I used a
> sharp drill without success and tried a knife, and it didn't do anywhere
> near as much damage as I wanted. I dunno what they use to make those
> buttons, but they're hard to work with, not so much tough as they are
> flexible and tend to give instead of be cut up. All I was trying to do
> was put a dimple in the middle of the button so I could recognize it by
> feel instead of having to turn the light on. Jeez, you'd think they
> would think of such things! Also if I go a little too deep, the whole
> button top might come off, exposing the innards and ruining the water
> seal. I may just fill it up with superglue.

I didn't say it was easy... keep experimenting. I wound up building
a jig to hold the thing steady against pressure from an exacto. Still
came out sloppy. Try replacing it with a shorter button from another
(dead) watch if it really bugs you.

Also try a Dremel or similar. Rough finish, but much better
look/feel.

> ...I did buy a Times Indiglo traveling alarm
> clock for ten bucks and I pulled it apart when I got it home, to see
> what was inside, then put it back together. I don't remember much other
> than the thing was jury rigged inside to correct some major booboos they
> made in the original PC board.

I noticed that too! I wonder if the entire production run had that problem...

Mark L. Fergerson

> OT: Didja hear about the Concorde? It was using Firestone tires!

You may be the first with that one...

1236. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <39ABFBE7.134C7F78@usa.alcatel.com>
Source record: 181566

I'm thinking that the folded monopole, capacitor resonated, is equivalent to a loop whose area and cross section are the same, but where the monopole is shunt fed against ground the loop is balanced.

Cortland
(ka5s@saber.net)

Tom W8JI wrote:

> On Mon, 28 Aug 2000 18:01:30 -0700, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >Tom,
> >
> >Can you give an order-of-magnitude estimate of the radiator size increase
> >needed to restore the capacatively loaded, folded monopoles efficiency? Can't
> >be worse than a tubing loop the same area, no?
> >
> >Cortland
> >(ka5s@saber.net)
>
> What do you mean by area? Do you mean conductor length, height, or
> what?
>
> 73 Tom

1237. Miltiband Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: paceral@aol.com
Message-ID: <20000829140931.20865.00000350@ng-cf1.aol.com>
Source record: 181567

For a fan dipole, more the one leg connected at common feed point, when used with 50ohn coax at the ffed point, do you need a Balun at the feedpoint? 1:1 or 4:1?
73

kf4oua

1238. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39ABFE56.3C3383AC@home.com>
Source record: 181568

Wayne Grauel wrote:
>
> I just want to address Chip and the others on the NG briefly.
>
> First, I'm relatively new, so I asked an intelligent question about what
> was fractenna, One gentleman came back with a very intelligent
> reply...one of the regulars and not one of the Fractenna group (as was
> explained), but gave me a very clear understanding of what and not who,
> a Fractenna was, and said nothing bad about him or them. this pretty
> much cleared things up for me.

Most of us try to stay polite. The object of the exercise here is
(supposed to be) the tech, not the personalities.

> You will notice I didn't really post anymore about it.
>
> A week or so later I saw a link to the Fractenna site so I looked at it
> and from my perspective of not knowing a whole lot about the concept (or
> antenna theory in any great depth) , It looked fascinating. I asked
> some intelligent questions, like what holds it together under snow, ice
> (only to realize that I was looking at the little two meter version)
>
> Here is my problem right now. I seemed to have generated quite a stir
> for a simple little question and now I know why.
>
> It seems like Fractenna gets a lot of abuse from the group... and as I
> see it, any ASSHOLE who re-posts a personal (partial) email completely
> out of context deserves everything he gets. Chip, don't give me any of
> your bullshit that the email was not marked confidential. That's the
> biggest bunch of crap I've ever heard. So what are you, an engineer or
> a lawyer. If you're not a lawyer, may you should study to be one. It
> will save you a ton of money for all of the people you need to sue for
> liable and patent infringements and God knows what else.

Chip et. al. have gotten so much crap from "innocent querents" that
they tend to lash out a lot, which naturally leads to a positive
feedback loop like what you wrote just above. Perhaps a bit of stress
management therapy for them is in order.
Sorry if that sounded like a slam Chip and Co., but please don't die
from a heart attack just yet. The fractal antenna concept _is_ valid
and needs more work to convince the doubters. If you die now it will
sit on a shelf for thirty years or so and the "rediscoverer(s)" will
get all the credit. Also, we'll have to wait longer for the
applications to come online.

Chip, read George O. Smith's _Venus Equilateral_. Most corporations
are run by lawyers who hire technical talent, and the lawyers tell the
techies what to invent and when to do it. Smith saw that a technical
businessman should stick to the tech, and hire lawyers to advise him
how to protect himself. Sounds like good advice to me.

> To set the record straight, I also noted that most of the people on the
> NG are way above my head in their level of engineering, and the degree
> of knowledge and theory each of you brings to the table. In other
> words. what I'm saying is You all know a heck of a lot more than I do,
> why would I judge?

That hasn't stopped some people...

> I truthfully thought that Fractenna was some kind of joke or someone
> posting stuff about a fractenna as a troll.
>
> From the outside looking in, it would not be hard to misjudge what one
> is reading.

That's just because you came in late.

> So, let it be clear, I have nothing against anyone out there, I was just
> asking a simple question.
>
> When you walk into this NG you see all this Fractenna stuff and all
> these posts about suing, liable, etc., etc. and you so have to wonder
> what the heck is going on because there's no threat of lawsuits, on any
> other threads as you guys discuss in great depth antenna theory.

New ideas, especially when presented by somebody who _dares_ mention
the concept of making money from them, generate trouble. That annoys
some Hams, but fractenna always made it clear that as is true with any
patent, building examples for experimentation is free. OTOH, a lot of
so-called Hams here seem to want to own a setup straight from the box
and don't care what's going on inside the shiny cases. Bending wire on
one's own is just too much trouble, I guess. (Some time ago I
mentioned that Hams used to be expected to be able to make their own
tubes if they had to. What happened to that kind of guts?) Besides,
if somebody finds something Chip et. al. didn't notice, they just
might get their _own_ patent.

> I've been on other newsgroups, and sometimes there is someone out there
> with no interest in the group (other than to stir up trouble) making all
> kinds of ridiculous statements and antagonizing the others in the
> group. these people are called trolls.

You'd think they had better things to do, like a little
soldering-iron therapy. I always find it calming.

> This is how it started... I loffed into the NG and rather than take
> about 1250 posts, I selected 100. After downloading a hundred topics
> guess what I was... HUGE threads with all these posts and people yelling
> and someone else out there threatening to sue everyone (not mentioning

> any names here). From my perspective it looked to me like that's what
> this guy calling himself Fractenna seemed to be doing. Keep in mind,
> this is strictly from the surface and how it appeared to me as I
> downloaded the first group of messages from the NG (yes, i was on a long
> time ago a couple of times, but there wasn't any Fractenna stuff going
> around). And obviously... this is why I asked?

Well, now you know.

> So, If my intentions or the nature of my question wasn't clear, I hope
> it is now. Sorry for all the trouble I've caused!
>
> Wayne
>
> Go ahead Chip... sue me!

Don't scratch! Watch that feedback!

Mark L. Fergerson

1239. Re: Looking for Don Johnson W6AAQ

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <8ogul2$28e$1@mark.ucdavis.edu>
Source record: 181569

Hi there Brendan,

Don lives near me in Esparto, California. I'm not sure if he's on the web,
but you can call him on the phone. I just looked up his phone number as
530 area code 787-3905

You might consider calling him during normal daylight hours. That would be
California Pacific Standard Time.

cheers
skipp@pilot.ucdavis.edu

: Brendan Minish <bminish@oceanfree.net> wrote:
: I am trying to get in touch with Don Johnson W6AAQ to find out more
: about his Screwdriver antennas but all I can find on the net is a
: collection of web pages with bouncing E-mail addresses, Does anyone
: have contact details for him and is he still making screwdriver
: antennas?
: thanks.

: Brendan Minish EI6IZ.
: --
: Brendan Minish
: The reply address works but
: This will get to me faster
: bminish at eircom dot net

1240. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AC002D.4D157EA4@eznec.com>
Source record: 181570
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.antenna

I hope the casual reader doesn't infer from this that cosmic rays are the same as radio waves. They're similar only in that they're also electromagnetic waves, but they have very different characteristics because of their much, much higher frequency and energy. Cosmic rays are ionizing radiation, like X rays and gamma rays. Radio waves are not, so they have a very different effect on the body. Ionizing radiation is the stuff of nuclear explosions, with well known bad effects, while so far the only firmly established effect of radio waves is heating, and it takes a very large amount to noticeably heat a body. (This effect is seen daily in microwave ovens.)

But, even if you got far from civilization, you would still be bombarded with radio waves (as well as cosmic rays). Some originate in space, from the Sun, stars, and planets. Others come from terrestrial sources like lightning storms. You just can't leave home without 'em.

Roy Lewallen, W7EL

Diamond Dave wrote:
>
> Everyone who has responded to this thread has mentioned the internal
> RF frequency (IF) in most radio receivers, including pagers and
> walkmans.
>
> But, is your pager a two-way pager? In that case, it is actually
> transmitting information.
>
> As also mentioned, most electronic devices emit RF. Ever put an AM
> radio next to your computer? You're getting a boatload of RF energy
> from not only your computer, but the monitor as well.
>
> If you don't like being hit with RF energy, you're almost out of luck
> these days in our modern society.
>
> But if you move to some place without these modern devices, you'll
> still be hit by cosmic rays from outer space!
>
> Dave Perusel
> Webmaster - Telephone World
> http://phworld.tal-on.com
>
> On Sat, 26 Aug 2000 22:46:22 +0800, "Dan Jacobson"
> <jidanni@kimo.FiXcomTHiS.tw> wrote:
>

> >Hello, I have a Motorola FLEX pager, that I clip on my belt. When my
> >walkman listening to an AM station gets close to it, I hear a
> >OoooOoooOoooOooo sound, indication that it is somehow putting out radio
> >signals. I thought pagers, like walkmans, just received signals, not
> >emitting... Would a pager then be supposedly more worrisome healthwise
> >than a walkman when close to the body all day? But if I were to put it in
> >my backpack to be away from the body, I could not be alerted in noisy
> >environments or at meetings, both of which I use the vibration alert
> >selection for.

1241. Re: Simple homebrewed loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39ABFF1D.EE0CEF41@3n.net>
Source record: 181571
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

jefff_b@my-deja.com wrote:
>
> Jason: You could use wire strippers for your only tool, and get some
> pre-terminated coax, cut one end off the coax, get some hookup wire,
> and use the wire strippers to strip the wire ends. Then use wire nuts
> to connect the hookup wire to the open end of the coax: one end of the
> loop to the center conductor, the other end to the shield.
>
> To the rest of you guys: where's your imagination?

Busy seeing smoke and lightning? .... ;O)

1242. Re: Miltiband Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AC0495.44561FAB@eznec.com>
Source record: 181572

PacerAl wrote:
>
> For a fan dipole, more the one leg connected at common feed point, when used
> with 50ohn coax at the ffed point, do you need a Balun at the feedpoint? 1:1 or
> 4:1?
> 73
>
> kf4oua

No more or less than you need a balun with any other dipole. Without a balun, current will flow along the outside of the coax, making the feedline part of the antenna. It's the job of a balun to reduce this current. The amount of current that flows depends on the length and orientation of the feedline. If the current is small, a balun won't do much. But if it's large, it can have a number of unpleasant effects. Your SWR can change when you move the feedline or change its length. You can pick up loss due to the feedline lying on the ground. RFI can be aggravated if the feedline runs close to power, telephone, or other wiring. And you can have "RF in the shack". Feedline radiation will also modify the antenna pattern, most typically moving or filling in pattern nulls. Some hams, including me, routinely use a balun for added insurance that the antenna will act as intended, but lots of others happily take what they get.

A 1:1 "current" balun would be the appropriate one for this application, since you don't need or want an impedance transformation.

Roy Lewallen, W7EL

1243. CushCraft MA5B Minibeam review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Alex Allan <alex@g3zbe.freeserve.co.uk>
Message-ID: <39AC069A.5EC38D8@g3zbe.freeserve.co.uk>
Source record: 181573

Interested in an unbiased review of the MA5B Minibeam?

Have alook at my website www.g3zbe.freeserve.co.uk.

The site is still under construction but the CushCraft MA5B info is complete.

Alex G3ZBE

1244. Auto Antenna Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Art Leganchuk <art.leganchuk@REMOVE.ec.gc.ca>
Message-ID: <39AC0EDE.2DD8AC87@REMOVE.ec.gc.ca>
Source record: 181574

1994 Pontiac has an antenna with noticably worse gain (AM band) than the

Dodge sitting next to it. Gain on the Pontiac increases discernably
when
someone touches the whip, while holding the Dodge's
whip makes no noticable difference.

Lead-in continuity and ground points have been checked, etc.

Pontiac has Antenna at the rear, so probably about 15 feet of leadin,
while
Dodge is maybe only 3.

Anybody have an idea how to correct the gain in the Pontiac Antenna??

1245. Re: Auto Antenna Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <mh6oqsc56p0tt1lmi00alht86t71p9qj30@4ax.com>
Source record: 181575

If the antenna is a magnet mount, try moving it to the center of the roof, or running a ground strap between the trunk lid and the body of the car. Your problem might just be a small groundplane.

By the by, what did you mean by leadin? Coax?

-SSB

On or about Tue, 29 Aug 2000 19:31:03 GMT, Art Leganchuk <art.leganchuk@REMOVE.ec.gc.ca>, using the forum rec.radio.amateur.antenna did say:

:1994 Pontiac has an antenna with noticably worse gain (AM band) than the
:
:Dodge sitting next to it. Gain on the Pontiac increases discernably
:when
:someone touches the whip, while holding the Dodge's
:whip makes no noticable difference.
:
:Lead-in continuity and ground points have been checked, etc.
:
:Pontiac has Antenna at the rear, so probably about 15 feet of leadin,
:while
:Dodge is maybe only 3.
:
:Anybody have an idea how to correct the gain in the Pontiac Antenna??
:
:

1246. Re: Auto Antenna Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <28246-39AC1938-43@storefull-118.iap.bryant.webtv.net>
Source record: 181576

Art Leganchuk wrote:
"Anybody have an idea how to correct the gain in the Pontiac antenna?"

Auto radios depend on resonance of the antenna circuit for performance.
If the antenna trimmer adjustment is off resonance, sensitivity suffers.
Try optimizing the antenna trimmer.

Best regards, Richard Hsarrison, KB5WZI

1247. Re: Miltiband Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <28246-39AC1D68-46@storefull-118.iap.bryant.webtv.net>
Source record: 181577

PacerAl wrote:
"For a fan dipole, more than one leg connected at common feed point, do you need a Balun at the feed point?"

A fan dipole may couple more energy into its feedline because of the difficulty of making the feedline perpendicular to all elements. A 1:1 balun may help equalize feedline currents.

Best regards, Richard Harrison, KB5WZI

1248. additional multiband dipole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39AC2186.7226B4D7@attglobal.net>
Source record: 181578

On previous multiband thread, Roy commented:
"No more or less than you need a balun with any other dipole. Without a balun, current will flow along the outside of the coax, making the feed line part of the antenna. It's the job of a balun to reduce this current. The amount of current that flows depends on the length and orientation of the feed line. If the current is small, a balun won't do much. But if it's large, it can have a number of unpleasant effects."
.....
My Question...

Roy, (and others)... would this apply to a G5RV (my only antenna) in a 2nd floor shack. I have coax going from my rig and tuner up into the attic, then outside and down the roof to the balun and twin lead feed line which is about 40 feet away from the exit point. the Balun hangs off the side of the house and the feed line loops up to the Dipole. I made my first contact on 10 meters the other night from MD to OK, but I'm still confused about grounding situations with an application like this. I doubt if I'm getting any RF because of the coax, but station grounding still confuses me. Some have said that a 2nd story shack is better off without a ground, because the electrical ground wire (chassis grounds) on any run of around 20 feet or so will actually be resonate and radiate RF. Is this correct.

Bye the way, the balun on the prefabricated antenna is sealed, meaning there is no coax connection, so the coax goes in one end and the twin lead comes out the other... the only RF connection is on the end of the supplied coax which is going into the tuner... I'm worried about lightning, though I'm tucked on the side of a hill with trees all around (much taller)... How does one protect a system like this?

From what I've read in the antenna handbook (the little one put out by ARRL) you ground the coax close to the antenna. Would it pay me to cut the coax close to the balun and insert some lightning protection and grounding device before it runs across the top of my roof?

Thanks,
Wayne
N3TNS

Roy Lewallen wrote:

> PacerAl wrote:
> >
> > For a fan dipole, more the one leg connected at common feed point,
> when used
> > with 50ohn coax at the ffed point, do you need a Balun at the

> feedpoint? 1:1 or
> > 4:1?
> > 73
> >
> > kf4oua
>
> No more or less than you need a balun with any other dipole. Without a
>
> balun, current will flow along the outside of the coax, making the
> feedline part of the antenna. It's the job of a balun to reduce this
> current. The amount of current that flows depends on the length and
> orientation of the feedline. If the current is small, a balun won't do
>
> much. But if it's large, it can have a number of unpleasant effects.
> Your SWR can change when you move the feedline or change its length.
> You
> can pick up loss due to the feedline lying on the ground. RFI can be
> aggravated if the feedline runs close to power, telephone, or other
> wiring. And you can have "RF in the shack". Feedline radiation will
> also
> modify the antenna pattern, most typically moving or filling in
> pattern
> nulls. Some hams, including me, routinely use a balun for added
> insurance that the antenna will act as intended, but lots of others
> happily take what they get.
>
> A 1:1 "current" balun would be the appropriate one for this
> application,
> since you don't need or want an impedance transformation.
>
> Roy Lewallen, W7EL

1249. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <_sVq5.2990$V67.122394@newshog.newsread.com>
Source record: 181579

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:8ofaumscp1@slb6.atl.mindspring.net...
> Roy:
>
> I, like you, consider email addressed to me as private correspondence,
just
> as I would a private letter or telephone conversation, and will never
> "publish" such communications.

"I think" that there is a defacto copyright on e-mail. In other words you don't have to list it as being copyrighted, nor do I know of any cases where posting private e-mail has ever been challenged under that guise, but...

"As I understand it" posts fall under similar provisions in that other than the archives and the original groups to which had the original post, that reposting to another group is supposed to require permission. Also any repost requires that the original poster be given full credit.

However I would not use the word never as if I received a threatening e-mail I'd not hesitate to post it. Any one doing so would want to make sure that the e-mail fell within the legal definition of threatening, rather than their perception of being threatening.

>
> In fact it is usual in bibliographic work to ask permission of the author
of
> such correspondence before revealing even it's subject matter and then
only
> with an acknowledgement.

Most writters will seek permission to use quotes from others work although it's not required if the author of the quote is given credit...but...one wants to be really careful that they are not using something out of context. Hence it's normal to not only name the source, but work and page as well.

Roger (K8RI)

>
> Clearly, as we have observed many times on this NG, the NG posters at the
> "Fractenna" address, do not seem to follow the "norms" of any form of
human
> communications. They apparently have their own rules of behavior in this
> regard and care little or nothing for the habits and behavior of
> "conventional" society in this regard. Bohemians perhaps, or...

>
> And so... advice to those who would communicate with Fractenna, should be
to
> do so only with restraint and caution.
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:39A9CBB3.21EB0894@eznec.com...
> > Gerald Schmitt wrote:
> > >
> > > I have to agree with you Fracadolf reposted my email also
> > > apparently the rules of good conduct and gentlemanly behavior
> > > simply don't apply to Nathan the twirp.
> > >. . .
> >
> > I've always considered all email to be private and confidential unless
> > the sender specifically gives me permission to reveal it, and feel that
> > this is simply common courtesy and considerations for others. I always
> > have, and always will, adhere to this standard, as I believe most others
> > do. But I've come to find out that other standards prevail. Chip has
> > stated quite a number of times that he considers it acceptable to
> > publicly post the contents of any email not specifically marked
> > "private" or "confidential", and has posted a number of email messages
> > sent to him. Regular readers of this newsgroup should be aware of his
> > policy, but newcomers are blindsided from time to time. Does anyone know
> > if this is a general practice, or if it is, as I hope, unusual?
> >
> > Roy Lewallen, W7EL
>
>

1250. BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <sqo8sgmc5d122@corp.supernews.com>
Source record: 181580

I can't seem to find any information about the power handling capability of
a BNC male to BNC female socket combination. I am interested only in a
in-door room environment type of setup. Anybody have any data or experience?

--
Leland C. Scott
KC8LDO

1251. Re: why do pagers emit radio frequencies?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15377-39AC2583-63@storefull-112.iap.bryant.webtv.net>
Source record: 181581

Diamond Dave wrote:
"If you don`t like being hit with RF energy, you`re almost out of luck these days in our modern society."

Don`t step outside in the sunshine! For all we know, moderate r-f exposure is therapeutic. Remember the diathermy machines?

Ionizing radiation such as x-rays is known to produce ill-effects in relatively small doses if exposure is prolonged.

Radiowaves as used for communications don`t produce ionization and studies are inconclusive in linking cause and effect between exposure and physical changes caused by moderate exposure to r-f.

Best regards, Richard Harrison, KB5WZI

1252. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8oh9ip$g9i$1@iac5.navix.net>
Source record: 181582

Be still my heart...

"Fractenna" <fractenna@aol.com> wrote in message >
> I will add that should offendors , such as yourself, behave yourselves, I
may
> be willing to continue answering fractal antenna questions on this NG.
> N1IR

1253. Re: BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ohd20dgf1@nnrp1.deja.com>
Source record: 181583

http://www.vitelec.co.uk/english/connectors/bnc.htm

In article <sqo8sgmc5d122@corp.supernews.com>,
"Leland C. Scott" <no-spam@junk-mail.net> wrote:
> I can't seem to find any information about the power handling
capability of
> a BNC male to BNC female socket combination. I am interested only in a
> in-door room environment type of setup. Anybody have any data or
experience?
>
> --
> Leland C. Scott
> KC8LDO
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

1254. A&A Engineering Tennamatic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Stephen Hoch <shoch@COMCAT.COM>
Message-ID: <39AC2C9F.E2553A7@COMCAT.COM>
Source record: 181584

Saw some stuff about tuning automatically the Screwdriver style of antennas. Can anyone steer me to the company A&A Engineering who make the product Tennamatic?

Thanks
SteveWU3I
wu3i@arrl.net

1255. Re: additional multiband dipole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39ae2ebc.21043468@news.seanet.com>
Source record: 181585

On Tue, 29 Aug 2000 16:48:06 -0400, Wayne Grauel
<wgvideo@attglobal.net> wrote:

>On previous multiband thread, Roy commented:
>"No more or less than you need a balun with any other dipole. Without a
>balun, current will flow along the outside of the coax, making the
>feed line part of the antenna. It's the job of a balun to reduce this
>current. The amount of current that flows depends on the length and
>orientation of the feed line. If the current is small, a balun won't do
>much. But if it's large, it can have a number of unpleasant effects."
>.....
>My Question...
>
>Roy, (and others)... would this apply to a G5RV (my only antenna) in a
>2nd floor shack. I have coax going from my rig and tuner up into the
>attic, then outside and down the roof to the balun and twin lead feed
>line which is about 40 feet away from the exit point. the Balun hangs
>off the side of the house and the feed line loops up to the Dipole. I
>made my first contact on 10 meters the other night from MD to OK, but
>I'm still confused about grounding situations with an application like
>this. I doubt if I'm getting any RF because of the coax, but station
>grounding still confuses me. Some have said that a 2nd story shack is
>better off without a ground, because the electrical ground wire (chassis
>grounds) on any run of around 20 feet or so will actually be resonate
>and radiate RF. Is this correct.
>
>Bye the way, the balun on the prefabricated antenna is sealed, meaning
>there is no coax connection, so the coax goes in one end and the twin
>lead comes out the other... the only RF connection is on the end of the
>supplied coax which is going into the tuner... I'm worried about
>lightning, though I'm tucked on the side of a hill with trees all around
>(much taller)... How does one protect a system like this?
>
>From what I've read in the antenna handbook (the little one put out by
>ARRL) you ground the coax close to the antenna. Would it pay me to cut
>the coax close to the balun and insert some lightning protection and
>grounding device before it runs across the top of my roof?
>
>Thanks,
>Wayne
>N3TNS
>

Hi Wayne,

From what you describe there's an even chance you already have everything in place and operational. A simple test would be to observe the SWR meter while you or someone else merely grabs the coax and moves their hand along its length (holding tin-foil is sometimes suggested). If there is any indication in change in the SWR then you have proof of currents residing on the coax's exterior which would then denote the failure of the BALUN to suppress them (one of its two operational characteristics).

This same test may suggest currents on the coax as a function of coupling of fields (this would suggest the dipole is not balanced, a different problem). However as the BALUN is responsible for snubbing conducted currents and not field induced currents, the difference would be one of magnitude (conducted currents would be greater than induced currents - except for the worst of balances).

Now, as to the topic of ground. You will note that nowhere in your antenna configuration is there any attachment to ground (aside from the ground lug on the tuner). If you were operating off of battery power, then you could reasonably be considered completely isolated from ground. This says nothing of safety considerations however which is a topic that is often co-mingled with RF Ground but is not the same thing. You could probably operate quite well without any other attachments, but it would still be a lottery every time a thunderhead moved over you.

If you were to remain battery operated, but used that ground lug to connect to earth ground; then some current may develop on it on the basis of the dipole's balance with respect to earth. This would satisfy some safety concern but would have no bearing on operation except to the extent of imbalance of the dipole.

If you were to switch over to the mains supply (through a power supply) then you would observe some ground path finding its way into the system (if only through the metal chassis and the commonality of power and RF grounds within each piece of equipment). AND If you were to also add that wire to earth ground to the lug in the back of the tuner; then you may become victim to the ground loop. This may be resolved if both your earth connection and the mains' ground were tied together, but even here there is room for RF to present interesting (but annoying) currents. The solution to this last incidental ground arriving through the mains is to break the path with an isolation transformer (with careful attention to isolating the input from the output - this generally is performed with a Faraday, or electrostatic, shield between the windings and separating grounds). The co-mingling of grounds is the greatest source of grief for many operators (even pro's).

Most safety solutions that are incorporated into the antenna system provide for some path to ground (you supply the real path however, and it better be a direct path to a good ground). However, this introduction of ground is in itself isolated until some incident (the lighting stroke or EMP) and it does nothing for your RF ground needs

(which for you approach zero). Keep in mind that moving the arrestor towards the BALUN only increases the length of the ground wire that would be used to drain the lightning stroke. You want to minimize this length and having the arrestor at the BALUN does not serve that purpose unless it is physically closer to the ground point than other alternative attachment points.

73's
Richard Clark, KB7QHC

1256. Re: CushCraft MA5B Minibeam review

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39af381d.23444361@news.seanet.com>
Source record: 181586

On Tue, 29 Aug 2000 19:53:14 +0100, Alex Allan
<alex@g3zbe.freeserve.co.uk> wrote:

>Interested in an unbiased review of the MA5B Minibeam?
>
>Have alook at my website www.g3zbe.freeserve.co.uk.
>
>The site is still under construction but the CushCraft MA5B info is
>complete.
>
>Alex G3ZBE

Hi Alex,

You have a nice site. Your work with CushCraft is done with a good
balance. I would like to see the numerics done in graphs or chart,
but you certainly cover the topic thoroughly and very well.

73's
Richard Clark, KB7QHC

1257. Re: A note to all about my fractenna question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39b03947.23742149@news.seanet.com>
Source record: 181587

On Tue, 29 Aug 2000 20:57:30 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>"I think" that there is a defacto copyright on e-mail.

Hi Roger,

Interesting spin on this topic. It is revealing how one can complain
of intellectual rights being trampled while violating them at the same
time. Of course the all encompassing "moral outrage" can be put to
use to justify any action - even if it is morally outrageous.

However, the fact that e-mail is the least secure medium for
intellectual rights, presuming any protection is laughable. On the
other hand, simply because no real protection exists is not an
imperative to violate rights in these same fanciful moral crusades.

Morality. To paraphrase Dr. Johnson (LLD), "moral outrage" is the
last refuge of a scoundrel.

73's
Richard Clark, KB7QHC

1258. Re: BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39AC35C7.645CEF47@dialpoint.net>
Source record: 181588

I don't have the data at hand, but it should be good for any power the
coax is rated for that will fit the connector. I have ran over 50 watts
with this combination without any problems.

"Leland C. Scott" wrote:
>
> I can't seem to find any information about the power handling capability of
> a BNC male to BNC female socket combination. I am interested only in a
> in-door room environment type of setup. Anybody have any data or experience?
>
> --
> Leland C. Scott
> KC8LDO

1259. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39AC5432.3A33@wt.net>
Source record: 181589

M1nn0w wrote:
>
> I posted this question under another topic but never got an answer. I 'll
> try again.
> Can one use Ladder line on a Aluminum sided house with storm
> windows???? I understand that the desire is to keep the line away from metal
> whenever possible.
> Perhaps the question is dumb but I'm really interested as I'd like to run a
> Long Wire outside
> but getting back into the house seems like it might be a problem????????

I wouldn't want it lying flat near any extended area of metal. But I
have tried closing an aluminum window on ladder line, and it didn't
really effect it much that I could tell. The window bottom kinda knife
edged and being it dropped down at an even angle to both conductors it
was balanced and a very short distance. Seemed ok.
But I wouldn't want ladder line lying flat against metal siding. I'd use
standoffs. To do it right, I'd also use an insulated window section for
the lead-in, but being I had no troubles, I didn't bother. It will work
with the window just closed down on it. Of course, you can't fully
close,or it will mangle the line. I just let the window down the that
level and stopped. Used a piece of foam to insulate the large crack at
the bottom. MK
--
http://web.wt.net/~nm5k

1260. Re: Receiving antenna question re 'matching' random wire.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <28246-39AC5CD6-78@storefull-118.iap.bryant.webtv.net>
Source record: 181590

Terry Sanford wrote:
"I will probably use RG8 or RG58---."

Why not use RG-11 or some 75-ohm TV cable to connect with your receiver. The receiver doublet input likely anticipates 75 ohms and this would be a slightly better match for your antenna on most frequencies.

Plated steel wire is as good as the plating depth and conductivity for antenna use. R-F penetration is slight, so the steel is not usually relevant.

Best regards, Richard Harrison, KB5WZI

1261. B & W BWD 1.8-30

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Chuck Elquist <w6jif@aic-fl.com>
Message-ID: <39AC4DA1.D87E0E0F@aic-fl.com>
Source record: 181591

Anyone in the group have any experience, good or bad, with the B & W
BWD 1.8-30? Broadband folded dipole.

Thanks,
Chuck
W6JIF

1262. Re: B & W BWD 1.8-30

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AC64EE.EB805A56@oio.net>
Source record: 181592

Chuck Elquist wrote:
>
> Anyone in the group have any experience, good or bad, with the B & W
> BWD 1.8-30? Broadband folded dipole.
>
> Thanks,
> Chuck
> W6JIF

Yes, have had experience, rip off, you don't even wanna go there.
'Doc

1263. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AC6E0C.1513861D@eznec.com>
Source record: 181593

Tom W8JI wrote:
>
> Hi Peter
>
> On Wed, 30 Aug 2000 00:14:08 +0100, Peter Murtha
> <peter.chicago@rfways.demon.co.uk> wrote:
>
> >bandwidth of the radiator regardless of mode of feed, however the folded
> >antenna is a simpler system which no longer requires the complication of
> >a base insulator.
>
> OK that's a mechanical advantage we have always agreed on.
>
> >I have never had a problem obtaining a 50 ohm match, even on a quarter
> >wave tower, and often the matching component can be reduced to one
> >component, i.e. a vacuum capacitor, with negligible associated loss.
> >I have had coils run pretty hot when using series feed on short masts
> >where the feed resistance has been below 10 ohms.
>
> That's where we disagee. While the capacitor is lossless, the entire
> area of the radiator is now involved in higher VAR currents.
>
> So instead of having losses confined to a few feet of coiled
> conductor, you now spread the loss over a few hundred feet of
> conductor. Indeed you can't feel or measure the heat, because it is
> distributed over a large surface area.
>
> This reminds me of the mind-games antenna manufacturers play, when
> they say "lossless linear loading".
>
>. . .

That's something that modeling should be able to represent quite well.
You should be able to get a pretty good quantitative comparison with a
few minutes effort.

Roy Lewallen, W7EL

1264. Re: B & W BWD 1.8-30

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39AC6F45.F9A503F@eznec.com>
Source record: 181594

There's been a great deal of discussion about this antenna in this newsgroup on many occasions. About every couple of months someone asks the same question as you just did, and people respond with a wide range of opinions. What they boil down to is whether you value the ability to apply power to the antenna without tuning more than you value radiating most of the power you do apply. I suggest doing a search of this newsgroup at www.deja.com. You'll find a wealth of postings on the topic.

Roy Lewallen, W7EL

Chuck Elquist wrote:
>
> Anyone in the group have any experience, good or bad, with the B & W
> BWD 1.8-30? Broadband folded dipole.
>
> Thanks,
> Chuck
> W6JIF

1265. Re: Receiving antenna question re 'matching' random wire.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15380-39AC678F-29@storefull-112.iap.bryant.webtv.net>
Source record: 181595

Terry Sanford wrote:
"I propose two taps on the untuned coil---."

A better scheme to avoid noise pickup on the feedline may be to use an isolated secondary of a few turns without direct connection to either antenna or ground to attach your feedline.

Noise will become common mode and balance out in the coils at either end of the feedline.
When your reference was published, this would likely have been twisted pair, but coax will serve the purpose.

Best regards, Richard Harrison, KB5WZI

1266. Re: BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8ohvcd$i7i@nnrp1.farm.idt.net>
Source record: 181596

"RanHefner" <ranhefner@my-deja.com> wrote in message
news:8ohd20dgf1@nnrp1.deja.com...

> http://www.vitelec.co.uk/english/connectors/bnc.htm

Thanks for the information, and the link. I bookmarked the link for future
reference.

Leland C. Scott
KC8LDO

1267. Re: BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8ohv7c$i57@nnrp1.farm.idt.net>
Source record: 181597

"Ralph Mowery" <rmowery@dialpoint.net> wrote in message
news:39AC35C7.645CEF47@dialpoint.net...
> I don't have the data at hand, but it should be good for any power the
> coax is rated for that will fit the connector. I have ran over 50 watts
> with this combination without any problems.

Great. That was what I was looking for. I have an antenna I built which has
a BNC jack. The power level I would be running is 50 watts on 2m.

Thanks,

Leland C. Scott
KC8LDO

1268. Re: Field Strength Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <22283-39AC7DAE-13@storefull-115.iap.bryant.webtv.net>
Source record: 181598

Scott Mann wrote:
"How does this circuit work?"

The publisher of the circuit could not supply it when I addressed the URL.

All field strength meters receive the signal and display a strength indication.

They are receivers of some calibrated sensitivity, large or small, depending on the particular use. To give good results they must be used with a particular antenna and operated under defined conditions. They often contain a calibration oscillator to set the sensitivity for accurate measurement.

Don`t have the circuit, so the capacitor function is unknown. I`ll guess that it was some variable type either used to set the frequency or sensitivity of the meter.

Best regards, Richard Harrison, KB6WZI

1269. Re: additional multiband dipole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39ACAB30.A9A1977B@eznec.com>
Source record: 181599

A G5RV is tougher, because a balun will work only when the impedances involved are reasonable. In an antenna like the G5RV, the impedance can vary a great deal from band to band, so the balun might not be effective on all bands. About the only solution, if you want balanced feed (that is, no current on the outside of the coax, or no common mode current on a two-wire feedline) is to use a balanced tuner or link coupling. Or you might be able to get a reasonably low common mode current with a combination of balun and fiddling the feedline length.

Mutual coupling from the antenna will also cause common mode current, and in some cases more than one balun is necessary to reduce the current to a low level.

If you have a properly functioning balun (hard to do on all bands with a G5RV), the current going into one of the feedline conductors equals the current coming out of the other. Then there isn't any left to go to ground, and there's no need for an RF ground connection at all. If, however, you do have a common mode current, an equal current will flow to ground by whatever path it can take. You'll want this path to have a low impedance. If you're reasonably close to an Earth ground, a large conductor or wide strap connected to several shallow-buried radials or even a metal water pipe where it enters the ground is probably adequate. If not, you might try connecting a quarter wavelength of wire to your rig and leave the other end open. This wire acts as the other half of the antenna being excited by the common mode current. If there's significant current, the rig should be "cold", but the other end of the wire will be "hot" and can have a fairly high RF potential. For something like the G5RV, you'd need one of these for every band where the balun doesn't do the job.

WARNING: These methods are NOT adequate or necessarily suitable for a lightning ground. Ground systems for lightning protection are a whole other problem. If you need one, you should carefully study the available information on the topic. A search of this newsgroup with deja.com will produce a lot of good information.

Roy Lewallen, W7EL

Wayne Grauel wrote:
>
> On previous multiband thread, Roy commented:
> "No more or less than you need a balun with any other dipole. Without a
> balun, current will flow along the outside of the coax, making the
> feed line part of the antenna. It's the job of a balun to reduce this
> current. The amount of current that flows depends on the length and
> orientation of the feed line. If the current is small, a balun won't do

> much. But if it's large, it can have a number of unpleasant effects."
> .....
> My Question...
>
> Roy, (and others)... would this apply to a G5RV (my only antenna) in a
> 2nd floor shack. I have coax going from my rig and tuner up into the
> attic, then outside and down the roof to the balun and twin lead feed
> line which is about 40 feet away from the exit point. the Balun hangs
> off the side of the house and the feed line loops up to the Dipole. I
> made my first contact on 10 meters the other night from MD to OK, but
> I'm still confused about grounding situations with an application like
> this. I doubt if I'm getting any RF because of the coax, but station
> grounding still confuses me. Some have said that a 2nd story shack is
> better off without a ground, because the electrical ground wire (chassis
> grounds) on any run of around 20 feet or so will actually be resonate
> and radiate RF. Is this correct.
>
> Bye the way, the balun on the prefabricated antenna is sealed, meaning
> there is no coax connection, so the coax goes in one end and the twin
> lead comes out the other... the only RF connection is on the end of the
> supplied coax which is going into the tuner... I'm worried about
> lightning, though I'm tucked on the side of a hill with trees all around
> (much taller)... How does one protect a system like this?
>
> From what I've read in the antenna handbook (the little one put out by
> ARRL) you ground the coax close to the antenna. Would it pay me to cut
> the coax close to the balun and insert some lightning protection and
> grounding device before it runs across the top of my roof?
>
> Thanks,
> Wayne
> N3TNS
>
> Roy Lewallen wrote:
>
> > PacerAl wrote:
> > >
> > > For a fan dipole, more the one leg connected at common feed point,
> > when used
> > > with 50ohn coax at the ffed point, do you need a Balun at the
> > feedpoint? 1:1 or
> > > 4:1?
> > > 73
> > >
> > > kf4oua
> >
> > No more or less than you need a balun with any other dipole. Without a
> >
> > balun, current will flow along the outside of the coax, making the
> > feedline part of the antenna. It's the job of a balun to reduce this

> > current. The amount of current that flows depends on the length and
> > orientation of the feedline. If the current is small, a balun won't do
> >
> > much. But if it's large, it can have a number of unpleasant effects.
> > Your SWR can change when you move the feedline or change its length.
> > You
> > can pick up loss due to the feedline lying on the ground. RFI can be
> > aggravated if the feedline runs close to power, telephone, or other
> > wiring. And you can have "RF in the shack". Feedline radiation will
> > also
> > modify the antenna pattern, most typically moving or filling in
> > pattern
> > nulls. Some hams, including me, routinely use a balun for added
> > insurance that the antenna will act as intended, but lots of others
> > happily take what they get.
> >
> > A 1:1 "current" balun would be the appropriate one for this
> > application,
> > since you don't need or want an impedance transformation.
> >
> > Roy Lewallen, W7EL

1270. Re: What Is The Theory Behind This Grounding Method??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39ACAC82.F93CABE0@mindspring.com>
Source record: 181600

However, flat conductors have less inductance for a given length than
circular ones, like wire. The better solution is to use a flat strip of
solid copper flashing. Less resistance, less inductance.

de Will KD7BFX

Tom W8JI wrote:
>
> On Mon, 21 Aug 2000 20:40:59 -0400, "R.P.Haviland" <bobh@iag.net>
> wrote:
>
> >For an RF ground, the best connection is a very short braid or strap to a
> >good ground such as several ground posts.
>
> Braided or woven conductors have several times the RF resistance of
> smooth surface conductors the same diameter.
>
> Braiding should be used only if the connection needs to be flexed, or
> on short leads.
>
> 73 Tom

1271. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:04:04 UTC
From: Peter Murtha <peter.chicago@rfways.demon.co.uk>
Message-ID: <tWP6SCA03vq5EwY6@rfways.demon.co.uk>
Source record: 181529

In article <39a9a4a7.13451482@news.akorn.net>, Tom W8JI
<2w8ji@contesting.com> writes
>Hi Peter
>
>On Sun, 27 Aug 2000 00:25:47 +0100, Peter Murtha
><peter.chicago@rfways.demon.co.uk> wrote:
>
>>There are real advantages to using a folded monopole, especially at MF,
>>but whenever the antenna is electrically short.
>>Folding the antenna, changes the sign of the input reactance, and the
>>positive input reactance of a short monopole allows the use of a
>>capacitor to bring the system to resonance.
>
>You have to be careful there.
>
>The differential mode impedance is inductive, and the hairpin monopole
>can be matched with capacitors, but it is NOT more efficient than a
>conventional monopole of the same height. As a matter of fact, it is
>less efficient unless great care is taken to minimize conductor
>resistance in the antenna.
>
>The reason for the lack of effficiency is the hairpin monopole (an
>electrically short folded monopole) has high circulating currents that
>involve the entire radiator. The VAR power is very high, worse than in
>a conventional inductor loaded antenna.
>
>
>The hairpin monopole has very restricted BW on frequencies where the
>radiator is a small fraction of a wavelength long. That is because VAR
>power is so high. Matching losses are less, if you don't consider
>circulating currents in the antenna part of "matching losses". If you
>do consider I^2 R conductor losses in the antenna as matching losses
>(they are certainly real losses) then you have to consider them
>antenna losses.
>
>On 3 MHz, some military hairpin monopoles are made from brass so they
>are "de-Qed" enough to handle a SSB voice channel!
>
>73 Tom
Hallo Tom, and also to Gray.
I wasn't recommending extremely short folded monopoles, and the Hairpin
Antenna really is an extreme case.
A short monople antenna will always have inherently small bandwidth,
regardless of configuration.

In most practical examples, ground losses will exceed the conductor losses within the antenna, and it is these ground losses which largely determine the overall efficiency and bandwidth of the system.
Bandwidth being inversely proportional to efficiency!
The advantage of the folded system is in the reduced losses in the matching networks which can be achieved using vacuum capacitors rather than inherently more lossy inductors.
For a given electrical height of monopole, the folded system can improve bandwidth by increasing the overall diameter of the radiator.
Perhaps one of the greatest advantages of the folded system is that it allows use of an existing grounded tower structure, and simplifies the connections to other antennas or lights mounted on the tower.
73 Peter.

--
Peter Murtha

1272. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 00:05:53 UTC
From: 2w8ji@contesting.com
Message-ID: <39aafe11.270166@news.akorn.net>
Source record: 181528

On Mon, 28 Aug 2000 20:20:58 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:

>Most of the azimuth plots are at 30 to 33° elevation. His graphs show
>total, horizontal and vertical. Total and vertical are very close with
>a very small horizontal gain in a more or less dipole type pattern.

How much down is the horizontal pattern, and what band is this on?
Sorry to ask so many questions, but I don't have access to the
article.

73 Tom

1273. Re: Texas Bug Catchers --- Any Recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 01:21:58 UTC
From: n4jzh@knology.net
Message-ID: <39ab0f91.88574793@news.knology.net>
Source record: 181530

On Mon, 28 Aug 2000 22:50:59 GMT, "Tony Hackenberg"
<mehawh@earthlink.net> wrote:

>I'm thinking about purchasing a "Texas BugCatcher" antenna from GLA Systems
>for mobile work. Yet, I have not heard much discussion about them in this
>newsgroup. Any recommendations or advice on BugCatchers?
>
>Since you can mix & match the basic components of a BugCatcher antenna,
>GLA's order form and web page (http://www.texasbugcatcher.com) are
>complicated. Adding to the complexity, many of the components come in
>differing sizes to better tailor them to your needs. I'm planning on using
>the BugCatcher on my Ford F-250 (1989) truck. I want to work 80-10 meters
>mobile. I've scoped out the following tentative list of components for the
>BugCatcher antenna:
>
>Model - GLA Systems' Texas BugCatcher Antenna (non-remote tune; not
>motorized)
>Mount - "Fold-over Trailer Hitch Mount" ($95)
>Quick-Disconnects - QOL (Long Base Screw-Off) ($32)
>Matching Coil - HD80 ($35)
>Mast - 5' ($38)
>Quick-Disconnects - QOM (Short Base Screw Off) ($30)
>Loading Coil - #480 Coil ($139)
>Extender Mast - Short Mast before Hat ($?)
>Capacity Hat - 6 inch diameter ($20)
>Quick-Disconnects - QOS (Small Screw-Off for Whip) ($20)
>Whip - 72" (6' - 3/16" x 102") ($18)
>Extra Coil Tap Kit - Spare coil taps etc ($12)
>
>Tony Hackenberg WA8SSQ
>
>
>
High Sierra HS-1500 is a winner hands down.
once installed NEVER have to leave the cab or seat
to tune. have had one for (2) years.BEST money Ive ever spent.
73 Donnie

1274. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 01:25:24 UTC
From: 2w8ji@contesting.com
Message-ID: <39ab0fb3.4784957@news.akorn.net>
Source record: 181531

On Tue, 29 Aug 2000 01:04:04 +0100, Peter Murtha
<peter.chicago@rfways.demon.co.uk> wrote:

>For a given electrical height of monopole, the folded system can improve
>bandwidth by increasing the overall diameter of the radiator.

Lets say you simply tie both conductors in parallel, and feed the
antenna as a marconi with a lumped inductor at the bottom.

Are you saying the bandwidth will always be wider when the antenna is
configured as a folded monopole with capacitors in the matching
system?

Are you saying the efficiency will always be higher also?

>Perhaps one of the greatest advantages of the folded system is that it
>allows use of an existing grounded tower structure, and simplifies the
>connections to other antennas or lights mounted on the tower.

Now that is a true advantage. It makes running cables up the antenna
much easier.

73 Tom

1275. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 01:27:21 UTC
From: 2w8ji@contesting.com
Message-ID: <39ab1111.5134765@news.akorn.net>
Source record: 181532

On Mon, 28 Aug 2000 18:01:30 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Tom,
>
>Can you give an order-of-magnitude estimate of the radiator size increase
>needed to restore the capacatively loaded, folded monopoles efficiency? Can't
>be worse than a tubing loop the same area, no?
>
>Cortland
>(ka5s@saber.net)

What do you mean by area? Do you mean conductor length, height, or
what?

73 Tom

1276. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 01:33:05 UTC
From: 2w8ji@contesting.com
Message-ID: <39ab11ad.5290863@news.akorn.net>
Source record: 181533

On Mon, 28 Aug 2000 18:36:47 -0700, "Oh Yeah!"
<maps75@pvtnetworks.net> wrote:

>Tom:
>
>There is one more very important difference: Q the
>open
>air large coil type antenna is VERY broad banded.
>While
>the 'ole 1/4 whip is acceptable, if you strictly
>run the normal
>40 channel spectrum and do no free-banding.

I don't know for sure what freebanding is, but I assume it means
screwing up frequencies assigned to other radio services.

If you have a shorter antenna, base loaded with no capacitance hat at
or near the top, and it is broader in bandwidth than a full 1/4 wl
antenna of the same general thickness as the area above the loading
coil then the extra bandwidth comes from increased loss.

73 Tom

1277. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 01:50:30 UTC
From: Bill, KC8MVW <tracker8565@my-deja.com>
Message-ID: <8of4suobe1@nnrp1.deja.com>
Source record: 181534

Thanks to all who responded. I have looked at the one site and it shows the exact antenna that I built. I will have to try it in that chunk of PVC tubing. Currently it is hanging unside down, with the feed line at the top, from the curtain rod in my room. Only 3" of the antenna are not in the window itself, but it is working somewhat better and my reports have improved. I will keep using it until I figure out what else might work. I will mess with it more when I have the time. Thanks again to all who have posted and e-mailed. I gives me something to think about when I am not studing.
-73's-
bb

Sent via Deja.com http://www.deja.com/
Before you buy.

1278. Re: Anyone using Strand Vise for tower guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 02:54:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <cBFq5.986$dD4.79361@monger.newsread.com>
Source record: 181535

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter Bertini" <commquart@erols.com> wrote in message
news:8of125$lb1$1@bob.news.rcn.net...
> Are we confusing two different items here?
>
> These are not "wrapped" around the guywire end--I think I know what
> you are talking about; and Texas Tower carries them.

Those would be the "big grip"? ends used with Phillistrand cable.
I use them and they are great, but you have to consider them disposable.
You can redo one of them twice, but not if they've been on for more than two
weeks.

With steel cable, I use the "wrap" method instead of clamps.
Again, the end becomes un-reuseable.

I've not used the ones you are talking about.

Roger (K8RI)
>
> .
> The strand vices are comprised of a stainless steel U loop, machined
> aluminum holder, and a bullet shaped device that the guy wire
> is run through. The internal mechanism is like a Chinese finger lock;
> but the cable can be released with a flat-blade screwdriver by relieving
the
> spring tension on the cable locking mechanism. They come in
> two different styles, one for insulators and one for rod eyes. Virtually
> every backguyed telephone pole I have seen uses the Strand Vice device
> at the guy rod. Reuse is not an issue, since the guys will have
turnbuckles
> that can be
> undone when needed. They do not appear to be suitable (due to the shape
of
> stainless steel U loops) for other than insulator or guy rod eye
> terminations. I am not
> sure they would mate properly with thimbles.
>
>
> Peter
>
>
>
> Oh Yeah! <maps75@pvtnetworks.net> wrote in message

> news:sqlvpom7t91114@corp.supernews.com...
> > Peter:
> >
> > There is good reason that you don't see them used
> > on towers to a
> > extent. That being that they are good for one
> > wrap-up when you
> > undo them the "grit" that holds the galvanized
> > stranded guy wire for
> > utility pole use is gone; get another guy wrap.
> > Now they could be used
> > quite successfully on guys where you put strain
> > insulators, but down
> > at the bottom where you might be re-tensioning the
> > cable, go for
> > thimbles and cable clamps. Al Piper; Central
> > Valley Electric Co-op
> > Inc. Just a chicken bander, but with two towers on
> > his place.
> >
> > "Peter Bertini" <commquart@erols.com> wrote in
> > message news:8oerq4$f7n$1@bob.news.rcn.net...
> > > I have a source for Strand Vice and telephone
> > style guy rods with mushroom
> > > caps.
> > >
> > > Has anyone used or have heard any pros or cons
> > regarding the use of Strand
> > > Vices in
> > > lieu of cable clamps to terminate the ends of
> > the guy wires? It seem
> > > strange I don't see
> > > these products being used on towers--just
> > utility poles. Any reason for
> > > this? I am
> > > considering using the Strand Vices on my new
> > Rohn 25G foldover tower next
> > > year.
> > >
> > > Peter
> > >
> > >
> > >
> >
> >
>
>
>

1279. Re: Which Antenna to buy for 2m operation?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 03:03:52 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <sKFq5.990$dD4.79111@monger.newsread.com>
Source record: 181536

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"KG4FGN" <kg4fgn@mindspring.com> wrote in message
news:8odvim$8kc$1@slb2.atl.mindspring.net...
>
> "Roger Halstead" <rdhalste@tm.net> wrote in message
> news:xwnq5.2292$V67.83745@newshog.newsread.com...
<snip>
>
> Well, here's my main problem. I live just south of Birmingham, Alabama.
> Between me and Birmingham is a mountain (Double Oak Mtn)! I can hear all
the
> repeaters just fine, but my five watt hand held just can't reach them,
even
> using a tree mounted antenna. That's why I got the new radio, hoping a
> little more umph will let me get over the mountain to the repeaters.

Possibly your've already done this, but:
Check to see if they are using tone access.
If so you might find that turning on the proper tone would even let your HT
get in...

Otherwise the repeaters may be running enough power so that you are hearing
signals that are being reflected and arriving in a direction other than
direct.
That's where the beam comes in handy.

>
> I think I'll start off using the antenna I have on hand and see if it will
> get out. (It's a MFJ portable J-Pole on the end of 50 foot of RG8, stuck
up
> in a tree). If so, I'll just stick with it.
>
> By the way, does anyone know where I can look up the radiation safety
> tables? I want to be able to use the 45 watt radio in my car. I have a mag
> mount antenna which is on the truck right now. However, I want to be sure
> not to harm my two young daughters when they ride in the back seat. I
wanted

It would almost certainly work better on top than on the trunk.
As to the radiation levels...I'd bet that the level is less than using the
HT "inside" the car and no where near the level when actually talking on
one.

Roger (K8RI)

> to see if I needed to move the antenna up to the roof, or is it OK on the
> trunk.
>
> Thanks again to everyone,
>
> Robert KG4FGN
>
>

1280. Re: YAHAQ (Yet another helic. ant. quest)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 04:34:18 UTC
From: Cory Papenfuss <papenfus@juneau.ece.uiuc.edu>
Message-ID: <e3Hq5.2650$9N1.45193@vixen.cso.uiuc.edu>
Source record: 181537

I wasn't planning on doing any freebanding... just the normal 40
channels. I was just thinking that the larger loading coil would let the
loaded antenna be "closer" to 1/4 wave in physical length and thus not be
so funky to resonate.

-Cory

Tom W8JI <2w8ji@contesting.com> wrote:
: On Mon, 28 Aug 2000 18:36:47 -0700, "Oh Yeah!"
: <maps75@pvtnetworks.net> wrote:

:>Tom:
:>
:>There is one more very important difference: Q the
:>open
:>air large coil type antenna is VERY broad banded.
:>While
:>the 'ole 1/4 whip is acceptable, if you strictly
:>run the normal
:>40 channel spectrum and do no free-banding.

: I don't know for sure what freebanding is, but I assume it means
: screwing up frequencies assigned to other radio services.

: If you have a shorter antenna, base loaded with no capacitance hat at
: or near the top, and it is broader in bandwidth than a full 1/4 wl
: antenna of the same general thickness as the area above the loading
: coil then the extra bandwidth comes from increased loss.

: 73 Tom

--

1281. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 04:43:58 UTC
From: k6mhe@arrl.net
Message-ID: <39ab3e25.1214082@news.mcn.org>
Source record: 181538

On Tue, 29 Aug 2000 00:05:53 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>On Mon, 28 Aug 2000 20:20:58 GMT, k6mhe@arrl.net (Dan Richardson)
>wrote:
>
>>Most of the azimuth plots are at 30 to 33ï¿½ elevation. His graphs show
>>total, horizontal and vertical. Total and vertical are very close with
>>a very small horizontal gain in a more or less dipole type pattern.
>
>How much down is the horizontal pattern, and what band is this on?
>Sorry to ask so many questions, but I don't have access to the
>article.
>
>73 Tom

Tom,,

Jack shows several plots.. Most are at 3.75 MHz. The maximum
horizontal gain is about minus 14-16 dB down from the maximum Vertical
gain and is somewhat perpendicular to the maximum total & vertical
gain.. (azimuth plots)..

Jack wrote a pretty good article you may wish to get a copy.

73
Danny

1282. Re: 300 Ohm FLAT twin lead antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 05:33:07 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39AB4B13.F08FAE88@oio.net>
Source record: 181539

Bill, KC8MVW wrote:
>
> Thanks to all who responded. I have looked at the one site and it
> shows the exact antenna that I built. I will have to try it in that
> chunk of PVC tubing. Currently it is hanging unside down, with the
> feed line at the top, from the curtain rod in my room. Only 3" of the
> antenna are not in the window itself, but it is working somewhat better
> and my reports have improved. I will keep using it until I figure out
> what else might work. I will mess with it more when I have the time.
> Thanks again to all who have posted and e-mailed. I gives me something
> to think about when I am not studing.
> -73's-
> bb

!! Antennas always took second place to my 'studing' too !!

(Sorry 'bout that Bill, just couldn't resist it...)
'Doc

1283. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-29 23:14:08 UTC
From: Peter Murtha <peter.chicago@rfways.demon.co.uk>
Message-ID: <SLf$RCAAPEr5EwmQ@rfways.demon.co.uk>
Source record: 181601

In article <39ab0fb3.4784957@news.akorn.net>, Tom W8JI
<2w8ji@contesting.com> writes
>On Tue, 29 Aug 2000 01:04:04 +0100, Peter Murtha
><peter.chicago@rfways.demon.co.uk> wrote:
>
>
>>For a given electrical height of monopole, the folded system can improve
>>bandwidth by increasing the overall diameter of the radiator.
>
>Lets say you simply tie both conductors in parallel, and feed the
>antenna as a marconi with a lumped inductor at the bottom.
>
>Are you saying the bandwidth will always be wider when the antenna is
>configured as a folded monopole with capacitors in the matching
>system?
>
>Are you saying the efficiency will always be higher also?
>
Hallo Tom,
I agree that the diameter of any mast or tower can be increased by using a cage of wires suspended by outriggers, and that will increase the bandwidth of the radiator regardless of mode of feed, however the folded antenna is a simpler system which no longer requires the complication of a base insulator.
I have never had a problem obtaining a 50 ohm match, even on a quarter wave tower, and often the matching component can be reduced to one component, i.e. a vacuum capacitor, with negligible associated loss.
I have had coils run pretty hot when using series feed on short masts where the feed resistance has been below 10 ohms.
Of course, it is always possible to use a bigger coil...
As to bandwidth, I once tried both systems of feed on a short top loaded vertical, about 300 ft, used on 252 Kilohertz.
The folded system gave noticeably better bandwidth, although both systems were pretty inefficient.
I guess you either like the system, or don't.
There have been many exaggerated claims made about the advantages of the method, especially in regard to ground losses.
Overall efficiency will always be determined by the quality of the components, and the extent of the ground system, but I do believe the folded monopole offers a simpler way to achieve this result at a lower cost.
As with any engineering problem, it all comes down to a compromise of performance versus cost.
Of course the folded system does modify the current distribution on the

mast, and that can be a disadvantage.....
I shall leave it there.
Best regards, Peter.
--
Peter Murtha

1284. HF j-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39ACB18D.C437B43A@mindspring.com>
Source record: 181612

There is a blurb in QST for September stating that the seperation between radiator and phasing section in a j-pole is non-critical. I had been wanting to try a j-pole for 10 or 15 meters for while, since I saw an ad for one on the old AntennasWest web site. The only problem was not knowing how to contruct one with proper spacing. Any ideas or experiences with HF j-poles?

de Will KD7BFX

1285. Re: Doublets and Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: bejones@hursley.ibm.com
Message-ID: <39acbeec.1989300@testnews.hursley.ibm.com>
Source record: 181613

Thanks guys

I guess the G5RV (again) or Carolina Windom will be the antenna of choice for the day :-(

The maypole sounds interesting but not enough time to experiment before the weekend. I'm not sure that the contest doesn't dictate a max of 2 supports so even this might be a problem (unless we support in the centre and bring each leg in inverted V tethered to the ground with looong rope ends). Another variation would be to make multiband tuned dipoles out of ribbon cable - I'm assuming if the ends of the ribbon are separated so each dipole end droops down I'll get reasonable isolation.

Appreciate the confirmation of my suspicions that the original idea was a non-starter.

Brian G0UKB
Brian Jones
Java Technology Centre
IBM Hursley Park
England

1286. Re: HF j-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000830041752.01442.00000447@ng-mg1.aol.com>
Source record: 181614

>There is a blurb in QST for September stating that the seperation
>between radiator and phasing section in a j-pole is non-critical. I had
>been wanting to try a j-pole for 10 or 15 meters for while, since I saw
>an ad for one on the old AntennasWest web site. The only problem was not
>knowing how to contruct one with proper spacing. Any ideas or
>experiences with HF j-poles?
>
>de Will KD7BFX
>

I, too, am puzzled by said comment. The bottom U of a J pole is not a 'phasing section' but a counterpoise. At HF it is not AS critical, and typically being off a few inches is not a problem. Perhaps that is what is meant.

Why do you need a J pole at HF anyway? Is it because it's easier to feed than a vertical dipole? It sure is huge!

73
Chip N1IR

1287. Article on Fractal Antennas in IEEE Transactions.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: Russell Macpherson <r.macpherson@abdn.ac.uk>
Message-ID: <39ACCF67.B745BBD4@abdn.ac.uk>
Source record: 181615

Hi All

I just thought I would drop a line and mention that there is a good article on "An Iterative Model for Fractal Antennas: Application to the Sierpinski Gasket Antenna" in the May 2000, vol.48, no.5 IEEE Transactions on Antennas and Propagation.

The main author is Carles Puente Baliarda of Fractus (http://www.fractus.com). It does have some maths in it but is an interesting read nonetheless.

Anyway, just thought I would mention it.

Russell.

--
Russell Iain Macpherson
Electromagnetics Research Group
University of Aberdeen
Scotland

1288. Re: Glass Mount 2 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: jefff_b@my-deja.com
Message-ID: <8oim8orso1@nnrp1.deja.com>
Source record: 181616

Hi Larry,
I put a Larsen dual band 2/440 glass mount on the driver's side rear window of my new Jeep a couple months ago. I put it about 3 inches from the top and about 6 inches behind the forward edge. On the MFJ antenna analyzer, it didn't look so hot, but in line vswr meter shows low standing wave on both bands. It isn't as hot as a mag mount on the roof, in that I have many more "marginal" areas into local repeaters, but it's good enough for my needs. Basically, the glass mounts are a compromise in favor of appearance, with a performance hit as a downside. I didn't get the MFJ dual band glass mount only because I felt it was probably even more of a compromise than the Larsen. But I'm probably just blowing smoke on that score...

Jeff
KA1OGM

In article <mSZq5.10532$Q36.775508@bgtnsc07-news.ops.worldnet.att.net>, "Larry Bratcher" <LABratcher@worldnet.att.net> wrote:
> I want to install my Kenwood G707 in my 2000 Chevy extended cab pickup. I'm
> considering trying the MFJ 2/70 glass mount antenna, but would like to hear
> from others about it first. I've heard that the glass mount antenna will
> not work properly on the tinted rear glass. I don't care if I loose a
> little efficiency due to the glass as I'm also concerned about looks. I'd
> like to here from others who have tried this type of antenna, especially on
> tinted glass.
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1289. Re: Miltiband Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: paceral@aol.com
Message-ID: <20000830062030.27598.00000049@ng-fm1.aol.com>
Source record: 181617

Great feedback Thanks. I see adds for 1:1 "voltage" baluns but not "current".
Do you have info on where i can get a current 1:1 balun?. I have only seen 4:1
current balns. AND for me the $64 dollar question is what is difference between
current and voltage balun.
BTY this site is giving me a real education. I appreciate all the subject
matter posted and the time people are willing to take to answer questions.

1290. Re: additional multiband dipole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39ACE0E8.4BC3ACEE@attglobal.net>
Source record: 181618

Richard, thank you for taking the time to explain and shed some further light on my ground situation. I'm sorry to have been so confused on this subject (or just being plain dense).

Some have said that it is better to leave it completely alone, which I think in one case is what you're saying (lesser of two evils) ,

The balun which I referred to is located just at the end of the twin lead (about 15 feet long if I remember). If I were to connect a commercial lightning arrestor or protection device in the coax by cutting the coax and adding pl259's on the other side of the balun, that ground point would be about a straight shot 15 feet down to earth where i could sink a ground rod. Short of hooking it to the twin lead going up to the horizontal legs of the dipole, this is the closest point to the antenna, from a true earth ground (and outside of the house) and almost directly below it (with exception of the twin lead looping back up towards the end gable of the roof.

Do I hear you correctly, that the coax shield from the inserted ground protection (at the antenna location) running back to the tuner and rig, is totally isolated (not actually connected to the (earth) ground wire and therefore not an actual earth ground) until which point when lightning were to strike, the connection would be established and then bled off to ground and not through the remaining 75 feet of coax to the inside of my house?

Thanks again for your explanation, especially the simple test for RF in the shack... Great info.
Sincerely,

Wayne
N3TNS

Richard Clark wrote:

> On Tue, 29 Aug 2000 16:48:06 -0400, Wayne Grauel
> <wgvideo@attglobal.net> wrote:
>
> >On previous multiband thread, Roy commented:
> >"No more or less than you need a balun with any other dipole. Without a
> >balun, current will flow along the outside of the coax, making the
> >feed line part of the antenna. It's the job of a balun to reduce this
> >current. The amount of current that flows depends on the length and
> >orientation of the feed line. If the current is small, a balun won't do
> >much. But if it's large, it can have a number of unpleasant effects."
> >.....
> >My Question...
> >

> >Roy, (and others)... would this apply to a G5RV (my only antenna) in a
> >2nd floor shack. I have coax going from my rig and tuner up into the
> >attic, then outside and down the roof to the balun and twin lead feed
> >line which is about 40 feet away from the exit point. the Balun hangs
> >off the side of the house and the feed line loops up to the Dipole. I
> >made my first contact on 10 meters the other night from MD to OK, but
> >I'm still confused about grounding situations with an application like
> >this. I doubt if I'm getting any RF because of the coax, but station
> >grounding still confuses me. Some have said that a 2nd story shack is
> >better off without a ground, because the electrical ground wire (chassis
> >grounds) on any run of around 20 feet or so will actually be resonate
> >and radiate RF. Is this correct.
> >
> >Bye the way, the balun on the prefabricated antenna is sealed, meaning
> >there is no coax connection, so the coax goes in one end and the twin
> >lead comes out the other... the only RF connection is on the end of the
> >supplied coax which is going into the tuner... I'm worried about
> >lightning, though I'm tucked on the side of a hill with trees all around
> >(much taller)... How does one protect a system like this?
> >
> >From what I've read in the antenna handbook (the little one put out by
> >ARRL) you ground the coax close to the antenna. Would it pay me to cut
> >the coax close to the balun and insert some lightning protection and
> >grounding device before it runs across the top of my roof?
> >
> >Thanks,
> >Wayne
> >N3TNS
> >
>
> Hi Wayne,
>
> From what you describe there's an even chance you already have
> everything in place and operational. A simple test would be to
> observe the SWR meter while you or someone else merely grabs the coax
> and moves their hand along its length (holding tin-foil is sometimes
> suggested). If there is any indication in change in the SWR then you
> have proof of currents residing on the coax's exterior which would
> then denote the failure of the BALUN to suppress them (one of its two
> operational characteristics).
>
> This same test may suggest currents on the coax as a function of
> coupling of fields (this would suggest the dipole is not balanced, a
> different problem). However as the BALUN is responsible for snubbing
> conducted currents and not field induced currents, the difference
> would be one of magnitude (conducted currents would be greater than
> induced currents - except for the worst of balances).
>
> Now, as to the topic of ground. You will note that nowhere in your
> antenna configuration is there any attachment to ground (aside from

> the ground lug on the tuner). If you were operating off of battery
> power, then you could reasonably be considered completely isolated
> from ground. This says nothing of safety considerations however which
> is a topic that is often co-mingled with RF Ground but is not the same
> thing. You could probably operate quite well without any other
> attachments, but it would still be a lottery every time a thunderhead
> moved over you.
>
> If you were to remain battery operated, but used that ground lug to
> connect to earth ground; then some current may develop on it on the
> basis of the dipole's balance with respect to earth. This would
> satisfy some safety concern but would have no bearing on operation
> except to the extent of imbalance of the dipole.
>
> If you were to switch over to the mains supply (through a power
> supply) then you would observe some ground path finding its way into
> the system (if only through the metal chassis and the commonality of
> power and RF grounds within each piece of equipment). AND If you were
> to also add that wire to earth ground to the lug in the back of the
> tuner; then you may become victim to the ground loop. This may be
> resolved if both your earth connection and the mains' ground were tied
> together, but even here there is room for RF to present interesting
> (but annoying) currents. The solution to this last incidental ground
> arriving through the mains is to break the path with an isolation
> transformer (with careful attention to isolating the input from the
> output - this generally is performed with a Faraday, or electrostatic,
> shield between the windings and separating grounds). The co-mingling
> of grounds is the greatest source of grief for many operators (even
> pro's).
>
> Most safety solutions that are incorporated into the antenna system
> provide for some path to ground (you supply the real path however, and
> it better be a direct path to a good ground). However, this
> introduction of ground is in itself isolated until some incident (the
> lighting stroke or EMP) and it does nothing for your RF ground needs
> (which for you approach zero). Keep in mind that moving the arrestor
> towards the BALUN only increases the length of the ground wire that
> would be used to drain the lightning stroke. You want to minimize
> this length and having the arrestor at the BALUN does not serve that
> purpose unless it is physically closer to the ground point than other
> alternative attachment points.
>
> 73's
> Richard Clark, KB7QHC

1291. Re: BNC connector Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:01:59 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8ohitakdu1@nnrp1.deja.com>
Source record: 181602

I could not find the documentation, but I seem to remember that BNC connectors will handle up to 500 Watts and N-Connectors handle up to 1500 watts. This is from memory and memory is not what it used to be! heheh

In article <39AC35C7.645CEF47@dialpoint.net>,
Ralph Mowery <rmowery@dialpoint.net> wrote:
> I don't have the data at hand, but it should be good for any power the
> coax is rated for that will fit the connector. I have ran over 50 watts
> with this combination without any problems.
>
> "Leland C. Scott" wrote:
> >
> > I can't seem to find any information about the power handling capability of
> > a BNC male to BNC female socket combination. I am interested only in a
> > in-door room environment type of setup. Anybody have any data or experience?
> >
> > --
> > Leland C. Scott
> > KC8LDO
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

1292. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:22:23 UTC
From: 2w8ji@contesting.com
Message-ID: <39ac516d.50409739@news.akorn.net>
Source record: 181603

Hi Peter

On Wed, 30 Aug 2000 00:14:08 +0100, Peter Murtha
<peter.chicago@rfways.demon.co.uk> wrote:

>bandwidth of the radiator regardless of mode of feed, however the folded
>antenna is a simpler system which no longer requires the complication of
>a base insulator.

OK that's a mechanical advantage we have always agreed on.

>I have never had a problem obtaining a 50 ohm match, even on a quarter
>wave tower, and often the matching component can be reduced to one
>component, i.e. a vacuum capacitor, with negligible associated loss.
>I have had coils run pretty hot when using series feed on short masts
>where the feed resistance has been below 10 ohms.

That's where we disagee. While the capacitor is lossless, the entire
area of the radiator is now involved in higher VAR currents.

So instead of having losses confined to a few feet of coiled
conductor, you now spread the loss over a few hundred feet of
conductor. Indeed you can't feel or measure the heat, because it is
distributed over a large surface area.

This reminds me of the mind-games antenna manufacturers play, when
they say "lossless linear loading".

>Of course, it is always possible to use a bigger coil...
>As to bandwidth, I once tried both systems of feed on a short top loaded
>vertical, about 300 ft, used on 252 Kilohertz.
>The folded system gave noticeably better bandwidth, although both
>systems were pretty inefficient.

Did you measure the difference?

I'm not trying to be difficult, but rather to keep minds in touch with
the fact that spreading losses out doesn't mean they go away. And if
you have a given size radiator and you don't change the common mode
current distribution of that radiator, you'd should be very wary of a
bandwidth increase when opposite sign reactances from normal series
feed are added to the matching system. The trend of that is to
decrease BW, not increase it.

There's a lot of folklore imbedded in the folded monopole.

73 Tom

1293. Log Periodic Question.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:24:32 UTC
From: "T.G." <shbcommm@indigo.ie>
Message-ID: <6vYq5.19645$r4.10227@news.indigo.ie>
Source record: 181604

Hi,
I have constructed a log periodic antenna for the frequency range 100 to 1300 MHz.
It is nearly ready to install onto my antenna mast outside but I still have to attach the coaxial line. I copied the antenna dimensions from a friends commercial design and noted that on this antenna the coax line terminates in a small solid rectangular plastic block (approx 10mm high, 15 mm wide and 40mm long) with bolts protruding for attachment to each of the two main booms ie one for the 'active side and one for the 'groundplane' side. What I need to know is this - Inside that plastic block would there be some sort of impedance matching device connected accross the two bolt heads, ie a balun, coil or whatever? Do log periodics have this tye of matching normally? The coaxial cable going into this block is RG58 which of course is 50 ohms, so I also intend useing this type.

Thanks for your time.
Terry

1294. Re: Folded Unipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:33:38 UTC
From: 2w8ji@contesting.com
Message-ID: <39ac53d2.51022179@news.akorn.net>
Source record: 181605

On Tue, 29 Aug 2000 11:07:35 -0700, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>I'm thinking that the folded monopole, capacitor resonated, is equivalent to a
>loop whose area and cross section are the same, but where the monopole is shunt
>fed against ground the loop is balanced.
>
>Cortland
>(ka5s@saber.net)

The small loop radiates because the sides have a spatial separation.
That alows a phase shift in space from one out-of-phase conductor to
the one opposite. It has no common mode current, or at least we don't
want it to have any. The normal direction of radiation is maximum
through the radius of the small loop.

The folded unipole (shorter than 1/4 wl) has significant "loop
currents", but the conductors are so close spaced (transmission line
distances) there is little radiation in that mode. The radiation is
pretty much all from common mode currents, which can be much smaller
than the differential mode currents.

Think of a short folded monopole as a loop that is too close spaced to
radiate, with all the losses of a loop of that conductor length and
current, driving a vertical with no loading system.

The inductance of the vertical feed wires is in series with the
capacitors used for matching, VAR power and circulating currents are
actually higher than a conventional base loaded antenna.

Around 1981 or so I tried to convince someone to manufacture just such
an antenna. I had egg on my face when efficiency was measured, and it
wasn't from breakfast.

73 Tom

1295. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 00:41:04 UTC
From: 2w8ji@contesting.com
Message-ID: <39ac567f.51708004@news.akorn.net>
Source record: 181606

On Tue, 29 Aug 2000 10:12:11 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>It looks to me like a 5 foot high vehicle will radiate as much as a 5
>foot vertical wire with some top loading (as much top loading as
>required to get about a 2:1 current ratio at the ends), provided that
>the antenna is placed at the center of the top of the roof. Likewise, a
>6 foot high vehicle will radiate as much as a 6 foot wire, and so forth.
>I believe this would be true regardless of the relative width of the
>vehicle

Looks that way to me also, assuming the vertical currents are the same
in the car body.

As I see it that means a 13' tall antenna above ground mounted in the
vehicle roof center works about the same as one mounted lower but
having the same above ground height, except for a little pattern skew
and a bit more loss from body to antenna coupling.

It's nice to know the car doesn't radiate real well, with a strong
horizontally polarized signal level like some texts claim. I think
this was the same conclusion reached a while ago when this was
discussed.

I guess I leave my antenna mounted on the upper corner of my truck bed
behind the cab, and not weld I- beams to the roof to support the
antenna.

73 Tom

1296. Re: Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 01:46:46 UTC
From: John & Deb <jminners@worldnet.att.net>
Message-ID: <39AC6808.4DFA@worldnet.att.net>
Source record: 181607

Mark Keith wrote:
>
> M1nn0w wrote:
> >
> > I posted this question under another topic but never got an answer. I 'll
> > try again.
> > Can one use Ladder line on a Aluminum sided house with storm
> > windows???? I understand that the desire is to keep the line away from metal
> > whenever possible.
> > Perhaps the question is dumb but I'm really interested as I'd like to run a
> > Long Wire outside
> > but getting back into the house seems like it might be a problem????????
>
> I wouldn't want it lying flat near any extended area of metal. But I
> have tried closing an aluminum window on ladder line, and it didn't
> really effect it much that I could tell. The window bottom kinda knife
> edged and being it dropped down at an even angle to both conductors it
> was balanced and a very short distance. Seemed ok.
> But I wouldn't want ladder line lying flat against metal siding. I'd use
> standoffs. To do it right, I'd also use an insulated window section for
> the lead-in, but being I had no troubles, I didn't bother. It will work
> with the window just closed down on it. Of course, you can't fully
> close,or it will mangle the line. I just let the window down the that
> level and stopped. Used a piece of foam to insulate the large crack at
> the bottom. MK
> --
> http://web.wt.net/~nm5k

Thanks Mark for another idea. Now if I could just convince the wife that
another antenna might just be the ticket :)

John

1297. Glass Mount 2 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 01:57:38 UTC
From: Larry Bratcher <LABratcher@worldnet.att.net>
Message-ID: <mSZq5.10532$Q36.775508@bgtnsc07-news.ops.worldnet.att.net>
Source record: 181608

I want to install my Kenwood G707 in my 2000 Chevy extended cab pickup. I'm considering trying the MFJ 2/70 glass mount antenna, but would like to hear from others about it first. I've heard that the glass mount antenna will not work properly on the tinted rear glass. I don't care if I loose a little efficiency due to the glass as I'm also concerned about looks. I'd like to here from others who have tried this type of antenna, especially on tinted glass.

1298. WTB: link coil sockets, pins, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 03:37:19 UTC
From: k9sqg@aol.com
Message-ID: <20000829233719.25579.00000068@ng-fa1.aol.com>
Source record: 181609

Looking for NOS sockets that will accept the various sizes of pins from link coils like from a BC-610 or larger. My primary need is for some "sockets" that will accept a BC-610 banana style pin or the larger size sockets that will accept the pins that are about 1/4 inch in diameter.

Thanks.

73

Evan

1299. Service Manual for IC-211

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 03:45:20 UTC
From: Chuck <sulch@gte.net>
Message-ID: <jm0pqsoov7dav4nadcbu5ma7f828d79960@4ax.com>
Source record: 181610

Hello, I am in need of a factory service manual, or a copy thereof; I have a 211 that is from 2.5KHz to as high as 19KHz higher than displayed frequency both TX and RX. When first powered up it is right on frequency then drifts the amount previously mentioned; however, once warmed up the drift stops and the unit is stable from there on.

If anyone out there can help it would be most gratefully received, please reply to sulch@gte.net

Thank you,
73s Chuck KG4ESR

1300. Re: SPI-RO MFG TRAP DIPOLES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-08-30 04:32:13 UTC
From: thompson@mindspring.com
Message-ID: <8oi376bmm1@slb6.atl.mindspring.net>
Source record: 181611

I use Spi-Ro 160 coils for short (50') radials on 160. At 4U1UN W8BLA and
K2UFT used the Spi-Ro 100' 160 antenna
and won multi op world in 1993 or 94. Don't know about the other bands.
Dave K4JRB

Kk4bh <kk4bh@aol.comnospam> wrote in message
news:20000828160127.20899.00000314@ng-cf1.aol.com...
> Has anybody had experiences with the Spi-Ro brand trap dipoles? Want to
put up
> a multiband resonant dipole. The W9INN's seem to perform very well (heard
much
> good about them) and was just curious about the Spi-Ro's. TNX in advance.
>
>
> 73's
> Ken Bjorklund
> KK4BH
> remove "nospam" when replying

1301. Re: The K2 FRACTAL FLYER ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-04 17:06:33 UTC
From: sideband@mindspring.com
Message-ID: <39B3D699.177215EF@mindspring.com>
Source record: 181389

I racked up about 60 of those hits last week in one sitting..

Fractenna wrote:

> In 3 short weeks, over 20,000 folks have checked out the K2 Fractal Flyer web
> page:
>
> http://www.fractenna.com/ham/hampage6.html
>
> Here's why:
>
> ========================
> *Low height profileâ□□only 8 feet high or less on 20M;
>
> *No ground screen or radials;
>
> *At least 10 dB front to back;
>
> *NO ATU OR COILS OR CAPS OR TRAPS;
>
> *Less than 1.8:1 SWR across the 20M band, for example;
>
> *Fits in footprint of about 1/4 wave by 1/8 wave;
>
> *EQUIVALENT OR HIGHER GAIN over a 1/4 wave monopole;
>
> *HIGHER GAIN than an 1/8 wave monopole;
>
> *Very low cost -just wire, solder, rope and a couple of hours of your time;
>
> *BETTER SIGNAL STRENGTH at low (DX) angles than a dipole of low height
> ---
>
> The following table summarizes the performance of the K2 and several other
> antennas at 10 degrees elevation from NEC4 simulations over good ground on 20M.
>
>
> Antenna Rel. Gain to Dipole at 1/8 wave (dB) F/B (dB)
>
> Dipole 0
> 0
> 1/4 monopole 2.3
> 0
> 1/8 monopole -0.8

> 0
> K2 2.4
> 9.5
>
> The antenna has low ground losses and higher low angle gain than other wire
> antennas in space restricted sizes.
>
> Fractal Antenna Systems, Inc has kindly allowed this patent pending(s) design
> to be built by hams for single, noin-commercial, experimental use. It is also
> being discussed on the fractal antenna refelctor, joiun us!:
>
> fractalantenna-subscribe@egroups.com
>
> Happy DX'ing!
>
> 73
> Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to use a
spell checker and don't take criticism well.

1302. test - please ignore

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-06 00:26:45 UTC
From: paulegan@home.com
Message-ID: <39c28f35.1549188@news>
Source record: 181518

```
test test
```

1303. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-06 20:54:27 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <I7CaFBAD8qt5EwTd@ifwtech.demon.co.uk>
Source record: 181480

Ed Hare, W1RFI wrote:
>
>> A LOT worse, What we' re seeing in Germany -- restricting radiated fields
>to the
>> CE immunity limit of 3 v/M-- is a lot worse.
>
>Once upon a time, I thought we needed immunity LAWS in the US to force those
>evil manufacturers to make things right. I have changed my mind.
>
>The best that one can realistically hope for in immunity standards is around
>3 V/m. This is the level that is found in the US and other worldwide
>standards. Translation: 100 watts to a half-wave dipole 100 feet away.
>This level of immunity won't do a lot to help hams with RFI problems, but
>could open the door to things like happened in Germany. The German
>regulators noted that on one hand, they had immunity laws, but on the other
>hand, amateurs were permitted to create much higher field strengths in their
>neighbors' homes. That is a regulatory imbalance and they decided to
>correct it.
>
I thought the UK held the European Prize for bureaucratic over-
enforcement, but we'll gladly hand it over.

The German regulatory authorities have always been twitchy about
radiation hazards, and maybe they're trying to kill the radhaz bird with
the RFI stone.

>There are certainly some disadvantages to voluntary immunity standards, but
>at least with them in place, everything is negotiable. If the regulatory
>alternative is applied both ways, the manufacturer has every leg to stand on
>and the ham must demonstrate 3 V/m in his neighbors homes.
>

It doesn't have to be as bad as that. Once the regulations have forced
designers to think about EMC, most equipment exceeds the immunity
standard by a significant margin (there are still problems with imported
junk that doesn't meet standards, but that makes it illegal which gives
us a negotiating advantage).

In the UK, most problems with RFI from amateur stations are solved by
finding and fixing an installation fault - usually in the receiving
setup. The immunity standard would only be invoked if all other cures
had been tried and failed, and excessive field strength was the *only*
problem left.

I don't know whether, on balance, it would be better if the European
regime was the same as in the USA, or t'other way around... but that's a

moot point - none of us has the luxury of being able to choose.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1304. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 04:57:16 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7202C.21B68D2B@bigfoot.com>
Source record: 181470

K1BQT wrote:
>
> >Rick is not a 'thing'.<
>
> I appreciate that too. So far, I'm having a pretty good day!

I'm a living thing. Aren't you a living thing? If not, what
are you?

If one says, "There's not a living thing in sight", doesn't
that include human beings?
--
http://www.mindspring.com/~w6rca

1305. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:01:53 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B72141.2A0C7D15@bigfoot.com>
Source record: 181471

Cortland Richmond wrote:
> My understanding was there were at least five FM and TV broadcasters on one hill
> overlooking Needham MA.

Try South Mountain south of Phoenix. It's hard to count that high.
--
http://www.mindspring.com/~w6rca

1306. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:04:49 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B721F1.E5592147@bigfoot.com>
Source record: 181472

"Ed Hare, W1RFI" wrote:
> If the typical RF immunity of 3 V/m applied, then I could imagine that
> happening.

Say Ed, I've often wondered whether spontaneous human combustion
might be caused by all the EM signals randomly getting into
phase with each other for something like a microsecond.
--
http://www.mindspring.com/~w6rca

1307. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:05:10 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <amFt5.5935$V67.300280@newshog.newsread.com>
Source record: 181469

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:Quzt5.551$u95.1424833@news.ntplx.net...
> Hi, Cortland,
>
<snip>
> The limits on FM and TV frequencies are lower, typically around 27.5 V/m.
> They do have higher gain antennas, of course, but by design, they radiate
> energy at the horizon, not below the antenna.

So does my stacked 2-meter array at 130 feet, but that is not taken into
account in the calculator I used to figure the exposure. They figure the
height, but it appears to only be used for calculating distance.

Roger (K8RI)

> The antennas are typically
> stacked at various heights on a very big tower, and that tower is
typically
> fenced. This is why most BC stations do comply with the rules. If I
> understand correctly, they need to document to the FCC that they are in
> compliance, though I don't know about any grandfathering of older
stations.
>
> 73,
> Ed Hare, W1RFI
>
> Cortland Richmond <Cortland.Richmond@usa.alcatel.com> wrote in message
> news:39B6799D.700623BE@usa.alcatel.com...
> > Ed,
> >
> > Without endorsing the ongoing flame wars, I will mention Needham, MA,
> where I
> > understand that at street level the total fields well exceed the limits
> 24/7.
> > Granted, not due to cell-phone towers. But broadcasters for some reason
> don't seem
> > impelled to cut power.
> >
> > Cortland
> > (ka5s@saber.net - who speaks only for himself and not for his employer)
> >
> > W1RFI wrote:

> >
> > > >Compare this to operators of cellular-phone systems, wireless
> > > >networks, studio-transmitter links, and other fixed point-to-point
> > > >and satellite installations in highly populated environments,
> > > >not to mention cell-phones and other devices themselves, all of
> > > >these operating well into the UHF-plus part of the spectrum.
> > >
> > > >Many, many of these are woefuly far from compliance, as are a
> > > >good number of FM broadcast and TV stations.
> > >
> > > Could you share with us the evaluations you have done on these
stations
> to
> > > demonstrate that they are woefully out of compliance? I have done
some
> rough
> > > calculations for a few cellular installations for hams with quesitons
> and
> > > determined that they were well within compliance. The broadcast
> stations have
> > > much more stringent requirements than Amateur Radio, so I am curious;
on
> what
> > > basis have you determined non-compliance?
> > >
> > > 73,
> > > Ed Hare, W1RFI
>
>
>

1308. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:07:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B722AE.96F8732B@oio.net>
Source record: 181473

K1BQT wrote:
>
> >I can see you've never asked for help from the ARRL! Give that a try then
> tell me about how much good, or how well they represent us.<
>
> That's a little rough. It's a complex organization. If you work for
> Microsoft, are you Bill Gates or are you still Doc?
>
> Rick K1BQT

If I were Bill Gates, they would offer more help than you'd
believe! Being just me, I was amazed at the 'run around' and
non-helpful 'help' I received. guess I should's told them I
was Bill Gates...
'Doc
PS - That also was the end of a 10 year membership.

1309. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:11:55 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7239B.F4AC0C41@bigfoot.com>
Source record: 181474

'Doc wrote:
>
> Jeff,
> A coaxial balun will work, but don't count on covering the
> whole 75/80 meter band with one antenna, at least without a
> tuner.

I cover the entire 75/80m band without a tuner by varying the
length of my ladder-line from 90ft to 110ft.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1310. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:22:43 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B72623.346433F1@bigfoot.com>
Source record: 181475

Donnie wrote:
>
> Hey Gang,
> I built a Cactus J-pole exactly as the plans call for
> and cant get below a 2.0 across the band.
> vertical is 58.5 long. driven is 19.25 1.5 between
> vertical and driven. 2.25 up from J to feed with mini-8.
> am I missing something. allpipe is 3/4inch.
> any suggestions?

Laid down, the J-pole looks like this:

```
<--1/4WL--><------1/2WL------->

+---x-------
|
+---x---------------------------
```

With the bottom 1/4WL stub shorted, you can get any impedance
between zero and a few thousand ohms by moving the feedpoint
(x,x) up or down. (up or down is right or left in the above).
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1311. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:45:41 UTC
From: n8wwm@aol.com
Message-ID: <20000907014541.03057.00002242@ng-fm1.aol.com>
Source record: 181476

I have never seen a more screwed up gut than Chip...i swear

1312. Re: Any Studs Wanna Fuck My Virgin Whiteboy Ass?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:48:21 UTC
From: n8wwm@aol.com
Message-ID: <20000907014821.03057.00002243@ng-fm1.aol.com>
Source record: 181477

GEEZ...you mean this ISNT Chip?

1313. Re: PUBLIC NOTICE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:50:53 UTC
From: n8wwm@aol.com
Message-ID: <20000907015053.03057.00002244@ng-fm1.aol.com>
Source record: 181478

HOW STUPID CAN YOU GET?

1314. Re: PUBLIC NOTICE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 05:52:11 UTC
From: n8wwm@aol.com
Message-ID: <20000907015211.03057.00002245@ng-fm1.aol.com>
Source record: 181479

Nathan is an idiot

1315. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 06:50:42 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B73AC2.97D9949F@oio.net>
Source record: 181481

CAM wrote:
>
> 'Doc wrote:
> >
> > Jeff,
> > A coaxial balun will work, but don't count on covering the
> > whole 75/80 meter band with one antenna, at least without a
> > tuner.
>
> I cover the entire 75/80m band without a tuner by varying the
> length of my ladder-line from 90ft to 110ft.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

And by doing so you are 'tuning' your feedline. What's the
difference? Personally, I'd rather do it from the operating
position with the tweek of a knob...
'Doc

1316. Re: What the heck is Fractal antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 07:03:20 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B73DB8.5219A902@oio.net>
Source record: 181484

"dmmmd\"at\"mindspring\"dot\"com" wrote:
>
> Checked out the web page, but didn't see details regarading
> availability and prices. Are these currently in production and are
> they in use by the general public? Or still in the developmental
> stage?
>
> David

To answer your questions;
1. No.
2. No.
3. Yes, and will be until the $98k research grant is used up.

'Doc

1317. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 07:15:29 UTC
From: sideband <sideband@cac.net>
Message-ID: <8tfersg005hdnt4ueuoch1gu55utmbs5lr@4ax.com>
Source record: 181482

Mark:

There has been some interesting research of late about how low audio
frequencies (under 20 Hz) can affect the state of a human being's
mind, making them feel a bit light headed, perhaps more open to
environmental stimuli, or higher planes of existence (if you believe
in that sort of thing), perhaps as you describe. Maybe there is a
correlation with HF RF?

I'm no expert in the field, I'll readily admit that, but it's at least
food for thought.

73's

-SSB

On or about Wed, 06 Sep 2000 16:44:22 -0500, Mark Keith <nm5k@wt.net>,
using the forum rec.radio.amateur.antenna did say:

:Cortland Richmond wrote:
:>
:> It's one thing to be cooked or burned; a LOT of us know THAT's possible. I
:> know one ham who goat a nasty burn from 10 just watts of 1.2 GHz when he
:> touched a beam's driven element.
:>
:> But non-thermal effects seem more controversial. However, I believe in 'em;
:> I had something happen to me.
:>
:> I used to live in an apartment where I had a 2m KLM 7 by 7 on a push up
:> pole on a bay window roof. The antenna just cleared the roof and the roof
:> line, but it worked fine for casual 2 meter SSB and FM, and a bit of
:> satellite work . One day I noticed something odd: Whenever I turned the
:> beam North for SSB, I got splitting headaches. No other direction. And I
:> had to be running SSB. CW or FM were no problem.
:>
:I've had a couple or three cases where RF seemed to make me feel real
:funny. And like you say, it would quit right when I'd quit keying, but
:mine was using cw. One example was from feeding a multiband dipole with
:a tuner on 160m. "Lots of rf in the shack I think". I'd work cw, and
:feel really strange after sending for a bit. Kinda light headed, etc.
:Quit sending and it would go away. Another time was running 80m cw from
:my mobile. I got appx the same feeling that time. And my head was 3-4
:feet from the base of the antenna. I do feel the effects of some rf. And
:the only case I've noticed it so far were on low frequencies. 160 and
:80. But I never notice anything like that from a properly decoupled
:antenna that is far enough away. In the 160 case, the antenna led right

:to my radio. No real feedline involved, and the mobile case, just too
:dang close. MK

1318. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 07:45:32 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B7479A.1D05C10E@mindspring.com>
Source record: 181483

I could see how an ordinance requiring only hands-free use while in motion could reduce accidents, but how are the States able to improve the quality of VOX/audio in cell phone models? The manufacturers have shown to date *extreme* reluctance, one might even characterize it as contempt, to suggestions from governement and citizen watchdog groups to improve their products. It was only when then were *compelled* to do so very recently that they began publishing RF emissions/exposure data from their products, protesting that coonsumers will be scared off without technical merit, ignoring the fact that maybe some of us might like to know what the EIRP from a given phone model's antenna is. That is useful data in choosing a phone, apart from any aid in evaluating the likely hazard to eye, ear, and possibly brain tissue, from poorly designed/situated collapsible antennas

I haven't been in to a shop to look over new phones and their packages, but I don't see that info anywhere in the ubiquitous print ads for service and portable units. No doubt it is printed in 6-point type somewhere in the back of the manual, right below the copyright info and corporate address.

Unfortunately, as is almost always the case now, it is probably going to take a number of high profile fatal accidents before anything happens with regard to driving safety, on the scale of the Explorer/Firestone debacle.

I guess what puzzles me most about the issue is why the use of dual-band mobiles by hams, and mobile hand-mike PTT-operated radios in general by all users hasn't caused more accidents, and cell-hones have? The only thing I can think of that makes sense is the differential in training and attitude between the typical cell-phone user and the typical mobile radio user. Cell-phones have become universal so suddenly, that we have adopted them so fast thaat we haven't had time to adjust to the split in attention. Most people just combine the two activities--driving and phoning--without a thought. Cell-phone use is casual and almost compulsive. Mobile radio usage is more structured and formalized, and we have been doing it a lot longer. I suppose it is also the case that you can hold the mike while still having both hands on the wheel, while listening. You don't have the thing jammed in your ear, tying up one hand all the time. A little care and attention and common sense would go a long way. I am not holding my breath--I just affixed a fresh "Hang Up and Drive!" bumper sticker.

de Will KD7BFX

CAM wrote:
>

> Will wrote:
> > I don't see how we can
> > ban cell-phone use while driving at this late date. . .
>
> Improving cell phones for hands free operation is being considered
> by a number of states.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1319. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 07:52:07 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B74924.BCB5B383@mindspring.com>
Source record: 181485

Which is to say, a non-solution. Having better waulity ahnds-free units
on the market might help out. An aggressive "education" campaign by
police also could help, if they vigorously looked out for and stopped
drivers who they see talking on the phone and drifting, weaving,
speeding up/slowing down, changing lanes for no reason, leaving blinkers
on or using the improper indication. A little lecture and
warning--backed up with the threat of a ticket, 2-points minimum--will
make an impression on a lot of folks. I am not as grouchy as I seem--the
problem as I see it is largely one of ignorance and thoughtlessness, not
contempt and selfishness. Most drivers confronted with the facts of
their dangerous driving while on the phone, and the facts of the dangers
of phone usage relative to drinking, will modify their behavior
subtantially.

de Will KD7BFX

Roy Lewallen wrote:
>
> What I've read indicates this doesn't help. The problem isn't what
> you're doing with your hands, but what you're doing with your brain,
> that makes you drive no better than the average drunk while yakking on
> the cell phone. But you're right. Politicians are looking at restricting
> operation to hands-free units. This makes it look like they're doing
> something, while not overly alienating their cell-phone-using
> constituents and contributors -- a typical political solution.
>
> Roy Lewallen, W7EL
>
> CAM wrote:
> >
> > Will wrote:
> > > I don't see how we can
> > > ban cell-phone use while driving at this late date. . .
> >
> > Improving cell phones for hands free operation is being considered
> > by a number of states.
> > --
> > 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1320. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 08:01:26 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B74B53.255D22AC@mindspring.com>
Source record: 181486

It's the newness and ubiquitousness of cell phones, in part. Give every 5-year old on the playground a full-auto M-16 with a 100-round box-mag, and turn them loose after showing them only how to reload, and see what happens. Hyperbole, I guess, but nobody has got it that you need to modify the way you drive and the way you talk on the phone, but mostly the way you talk on the phone. Instead of yakking, and driving, full-speed, around an accident scene or road crew, or likewise in a blinding rain, either tell the caller you'll call them back, and hang up until you have cleared the hazardous condition, or tell them to hold on and set the receiver down until then. No one seems to have the sense to do this, yet I see mobile radio users (ham and otherwise) do this almost always in such circumstances. It is experience, and training. Like the bumper sticker says: "Hang Up and Drive!"

de WIll KD7BFX

CAM wrote:
>
> Roy Lewallen wrote:
> > The problem isn't what
> > you're doing with your hands, but what you're doing with your brain,
> > that makes you drive no better than the average drunk while yakking on
> > the cell phone.
>
> Two-way radios have been around for the better part of a century.
> What makes cell phones any different? Is dialing-the-number the
> major problem? Is dialing a number any worse than dialing a
> frequency? Shirley, talking on a mobile radio is nothing new.
> (Yes, Jim, cell phones operate in the RF spectrum and therefore
> *are* radios.)
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1321. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 08:04:52 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B74C21.E74E86DF@mindspring.com>
Source record: 181487

Only a ham, or an ornithologist (you aren't perhaps both, are you?),
would think of a salt marsh as a dream piece of real estate, hi. Oh, and
I think you forgot to mention ". . .and a 50-piece CCA-EXC Collins
set-up. . ."

de Will KD7BFX

"David J. Windisch" wrote:
>
> Britney Spears?
>
> Nahhhh. My idea of a sweet young thing is at least 55, with resume, 3 refs
> with fone numbers, a solid net-worth statement, a 500-acre salt marsh, and
> an Extra.
>
> K3BHJ

1322. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That The Truly Incompetent Adjudge Themselves To be The Most Competent Alive)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 08:40:58 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B75493.43E70079@mindspring.com>
Source record: 181488

In a recent (sometime last Spring) study published in Science magazine, it was shown that 'incompetence' is the greatest bar to a subject not recognizing the fact that he or she is in fact incompetent.

Several groups of experimental subjects were tested (various IQ, achievement, and specific skill-set measuring tools were used) on their mathematical, musical, verbal, logical reasoning, visual-spatial, and social (listening, empathy, conflict-resolution, humor, assertiveness) skills, and then they were interviewed by psychologists and asked to give detailed self-assessments of their abilities in each of these areas, and to predict how they did on each test (in absolute terms [raw score] and also relative to other members of their group).

What they found was interesting, to say the least. Consistently, through several repetitions of this carefully designed, well-controlled study of over 1000 subjects (male and female, ages ranged approx. 18-75, cross-section of incomes, educationa; achievement, occupation, ethnicity) it was found that the subjects who scored in the bottom quartile (the bottom 25%) in a given assessment measure self-ranked themselves in the 70th percentile or above. It gets much more detailed and elaborate than this, if you are interested I will dig up the reference, I think they have it put up on a web page. But suffice it to say that the investigators concluded that by being low-skilled and incompetent at say, logic or conflict resolution, this incompetence leads people to over-estimate their ability grossly. The skills one needs to give an accurate self-assessment are precisely the skills that are lacking. This is why we have teachers and evauation tools for licenses, school admissions, etc. This is also why the dumb, climbsy, and thick-headed (not to mention the ugly) are so confident they are geniuses, and happily oblivious to reality. These researchers also found the opposite to correlate strongly--high-functioning subjects, those in the 90th percentile, almost laways ranked themselves near the 50th percentile (thus "average") or lower. Being smart, well-informed, and highly-skilled in a given area, or in general, seems to cause such people to have rational doubt (i.e. not neurotic ideas that "I am no good/no good at _____"). Intelligence and education breed healthy skepticism and the semand to be shown, to have a thing demonstrated and proved.

I will try to find the URL, or dig out the article and scan it, so that all who care to can see the psychology and social-psychology behind the behavior of some members of our newsgroup.

de Will KD7BFX

Tom W8JI wrote:
>
> On Wed, 6 Sep 2000 14:50:32 -0400, "Dean Craft" <w4ihk@mindspring.com>
> wrote:
>
> >Yea, Steve; quit trying to confuse him with the facts. He already has his
> >mind made up!
> >
> >Dean Craft -- W4IHK
>
> Imagine how slow the learning process is when you already think you
> are smarter than everyone else, and won't answer questions!
>
> Now imagine trying to teach, when everything you know is wrong.
>
> Now imagine both of those flaws rolled into one persona, and tell me
> who comes to mind.

1323. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 09:03:49 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B759ED.F0A93F10@mindspring.com>
Source record: 181489

The difference is frequency, power level, duty cycle, and number of users/signals/antennas, and financial liability. Most hams aren't on the air 800 MHz, >800 MHz, 24 hours a day, unlike many commercial users. Commercial traffic, per base station, is usually much higher than a typical ham station. Then there is legal liability. Lawyers are out there, I am guessing but I am sure of this, literally cruising around with calibrated FS meters and OptoTrackers looking for antennas atop commercial and industrial buildings, and knocking on homeowners' doors. The FCC may be the least of commercial users worries.

BTW, there are a considerable number of dedicated VHF/UHF/SHF hams who have the calibrated FS meters, attentuators, RF voltmeters, and know hoe to use them to measure field levels and exposure, and are damn proud of the cleanliness, and safety of their stations. Knowing the math and RF engineering also will often eliminate the absolute need for $50K worth of specailized test gear anyway. Exposure meters aren't so much expensive, as a bit overboard, if you are only going to use them at one or two sites a couple of times. Simple tools and solid command of theory is perfectly adequate to get very accurate measuremtns.

de Will KD7BFX

K1BQT wrote:
>
> In the past, several people have taken me to task for emphasising the
> importance of using baluns and other common-mode feedline suppression
> techniques. I've been told that I'm over-reacting and suppression just isn't
> that important.
>
> Fact is, these RF- exposure pencil and paper compliance calculations are
> totally worthless unless all station feedlines are all dead cold (and that's
> rarely the case)!
>
> Go to any commercial communications show, and you'll see vendors selling
> exposure meters that actually measure what's happening at the transmitter or
> operating site. Hams, on the other hand, who are often far less sophisticated
> in their "site engineering" skills, have no such gizmo to check reality.
>
> What's with that? Cardboard calulators and pencil charts may help us determine
> if our stations are potentially in compliance. But without an actual
> measurement on each band, what do we really know! Straighten me out--am I
> being stupid or are we missing the obvious here?
>
> Rick K1BQT
>

1324. Re: PUBLIC NOTICE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 09:06:44 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B75A9B.D4839D0F@mindspring.com>
Source record: 181490

But he does make a mean frankfurter!

N8wwm wrote:
>
> Nathan is an idiot

1325. Re: Starting a small AM or FM radio station

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 09:10:52 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B75B93.B4BF3F73@mindspring.com>
Source record: 181491

Jeff,

Go to th Federal Communications Commision's web site, www.fcc.gov, and look up info on applying for a Low Power FM radio station license. The fee is very little, and you can get the coverage area you seek easily that way. It is a new program, just annopunced early this year, expresly for such community based applications as you propose. Be sure to get a license though--you can buy the equipment and get on the air without it, but the FCC is very aggressive in shutting unlicensed stations, even churches and community groups--down, and they can even levy a fine. Good luck, the proces is a lot easier and simpler than you might expect, and the equipment will set you back only about $2000 for a good professional set-up

de WIll KD7BFX

Jeff House wrote:
>
> Hi,
>
> We are considering allowing the youth at our church to operate a radio
> station for their music/interests etc. for the local area.
> I'm just beginning to gather info on if this is even a possibility.
>
> Could someone here point me to a good source of information on how to start
> a very low-power (AM or FM) radio station (say, 5-15 mile reach)?
>
> Thanks,
>
> Jeff
> sing4god@ipass.net

1326. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 10:26:33 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <7ZJt5.395$vc7.1327@newsfeed.slurp.net>
Source record: 181492

Collins?

NAHHHHHHHHH. I'd be content with a blooper, a '210 TNT (heard what sounded like one in a pileup on 40 last eve), verticals, and, I did forget to mention, the sweet young thing's well-stocked junkbarn. You know, Dayton flea circus, Mendelssohns, Fair, ALL of ooooold Canal Street, 7th and Erie, Surplus Sales ...
heavy sigh ...

I'm a 'bird' myself: the 40 meter curmudgeon. You oughtta see my blackhawkornithopter. Only foreign signals allowed in my saltmarsh. No lids, no kids, no space cadets ...

K3BHJ

1327. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 10:35:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8p7qvk$12g$1@uranium.btinternet.com>
Source record: 181493

If it works, don't fix it.

Reg.

1328. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 10:37:16 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <b6Kt5.400$vc7.2063@newsfeed.slurp.net>
Source record: 181494

Cec, stay there on South Mountain long enough and maybe you'll grow enough mutant appendages to count high enough.

K3BHJ

1329. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 10:55:46 UTC
From: sideband <sideband@cac.net>
Message-ID: <t0tersg91ar9pqi4911uto2128697q9va0@4ax.com>
Source record: 181495

Reg:

It works, and I won't fix it. ::grin:: Thanks for the advice.

73's

-SSB

On or about Thu, 7 Sep 2000 11:35:53 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com>, using the forum rec.radio.amateur.antenna
did say:

:If it works, don't fix it.
:----
:Reg.
:
:
:

1330. Got anybody you don't like?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:06:46 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <aFKt5.1141$LS.76788@bgtnsc05-news.ops.worldnet.att.net>
Source record: 181496

This was on the antenna group,
Mike

You vulgar little maggot. Don't you know that you are pathetic? You worthless bag of filth. As we say in Texas, I'll bet you couldn't pour
piss out of a boot with the instructions on the heel. You are a canker. A
sore that won't go away. I would rather kiss a lawyer on the lips than be
seen with you.

You are a fiend and a sniveling, back-boneless coward, and you have bad breath. You are degenerate, noxious and depraved. I feel debased just for
knowing you exist. I despise everything about you. You are a bloody nardless newbie twit protohominid chromosomally aberrant caricature of a

coprophagic cloacal parasitic pond scum. And I wish you would go away.

You're a putrescent mass, a walking vomit. You are a spineless little worm
deserving nothing but the profoundest contempt. You are a jerk, a cad, a

weasel. Your life is a monument to stupidity. You are a stench, a revulsion,
a putrefaction, a big suck on a sour lemon with a lime twist.

You are a bleating foal, a curdled staggering mutant dwarf smeared richly
with the effluvia and offal accompanying your alleged birth into this world.
An insensate, blinking calf, meaningful to nobody,
abandoned by the puke-drooling, giggling beasts who sired you and then killed themselves in regret for what they had done.

I will never get over the embarrassment of belonging to the same species as
you. You are a monster, an ogre, a malformation. I barf at the very thought
of you. You have all the appeal of a paper cut. Lepers avoid you. You are
vile, worthless, less than nothing. You are a weed, a fungus, a ferment,
the dregs of this earth. And did I mention you smell?

If you aren't an idiot, you made a world-class effort at simulating one.

Try to edit your writing of unnecessary material before attempting to impress us with your insight. The evidence that you are a nincompoop will still be available to readers, but they will be able to access it more rapidly.

You snail-skulled little twit. Would that a hawk pick you up, drive its

beak into your brain, and upon finding it rancid set you loose to fly briefly before spattering the ocean rocks with the frothy pink shame of your ignoble blood. May you choke on the queasy, convulsing nausea of your own trite, foolish beliefs.

You are weary, stale, flat and unprofitable. You are grimy, squalid, nasty and profane. You are foul and disgusting. You're a fool, an ignoramus. Monkeys look down on you. Even sheep won't have sex with you. Your hand even refuses autoerotism. You are unreservedly pathetic, starved for attention, and lost in a land that reality forgot.

And what meaning do you expect your delusional self-important statements of unknowing, inexperienced opinion to have with us? What fantasy do you hold that you would believe that your tiny-fisted tantrums would have more weight than that of a leprous desert rat, spinning rabidly in a circle, waiting for the bite of the snake?

You are a waste of flesh. You have no rhythm. You are ridiculous and obnoxious. You are the moral equivalent of a leech. You are a living emptiness, a meaningless void. You are sour and senile. You are a disease, you puerile one-handed slack-jawed drooling meat slapper.

On a good day you're a half-wit. You remind me of drool. You are deficient in all that lends character. You have the personality of wallpaper. You are dank and filthy. You are asinine and benighted. You are the source of all unpleasantness. You spread misery and sorrow wherever you go.

I cannot believe how incredibly stupid you are. I mean rock-hard stupid. Dehydrated-rock-hard stupid. Stupid so stupid that it goes way beyond the stupid we know into a whole different dimension of stupid. You are trans-stupid stupid. Meta-stupid. Stupid collapsed on itself so far

that
even the neutrons have collapsed. Stupid gotten so dense that no
intellect
can escape. Singularity stupid. Blazing hot mid-day sun on the warm
side
of Mercury stupid. You emit more stupid in one second than our entire
galaxy emits in a year. Quasar stupid. Your writing has to be a troll.

Nothing in our universe can really be this stupid.

Perhaps this is some primordial fragment from the original big bang of
stupid. Some pure essence of a stupid so uncontaminated by anything
else as
to be beyond the laws of physics that we know. I'm sorry. I can't go
on.
This is an epiphany of stupid for me. After this, you may not hear from
me
again for a while. I don't have enough strength left to deride your
ignorant questions and half baked comments about unimportant trivia, or
any
of the rest of your drivel.

The only thing worse than your logic is your manners. I have snipped
away
most of what you wrote, because, well... it didn't really say anything.

Your attempt at constructing a creative flame was pitiful. I mean,
really,
stringing together a bunch of insults among a load of babbling was
hardly
effective... Maybe later in life, after you have learned to read, write,

spell, and count, you will have more success. True, these are
rudimentary
skills that many of us "normal" people take for granted that everyone
has an
easy time of mastering. But we sometimes forget that there are
"challenged"
persons in this world who find these things more difficult. If I had
known,
that this was your case then I would have never read your post. It just

wouldn't have been "right". Sort of like parking in a handicapped
space. I
wish you the best of luck in the emotional, and social struggles that
seem
to be placing such a demand on you (like passing gas, for instance).

In short, if I traded you for shit, I would lose the container I brought
you
in. Otherwise, have a good day.

--

--
Mike Knowlton
Panama City Fl.

1331. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:07:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8p7t72$9gv$1@nntp9.atl.mindspring.net>
Source record: 181497

Thread:

Hey, I love the ARRL as well as the next ham, been a member for over 30
years, but "leadership" has been sorely lacking.

We need to learn from the NRA about how to be an effective special interest
group, we need to elect someone like Chalton Heston as the President of the
ARRL, maybe then "we the people" will get to keep the spectrum that we
already own!

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
'Doc <w5lz@oio.net> wrote in message news:39B62C34.D39120F0@oio.net...
>
>
> Fractenna wrote:
> >
> > >If our ARRL people have an attitude like above, then we got
> > >another
> > >> nail in Ham Radio coffin.
> >
> > Ham radio as you fantasize it is already dead. The ARRL is blameless on
all
> > acounts. Get in compliance and be quiet.
> >
> > Please.
> >
> > NC
>
> 'Frac'
> They've done more harm in the last 10 years than they
> did good in the 50 years before that.
> 'Doc

1332. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:24:31 UTC
From: fractenna@aol.com
Message-ID: <20000907072431.20199.00000005@ng-da1.aol.com>
Source record: 181498

>In a recent (sometime last Spring) study published in Science magazine,
>it was shown that 'incompetence' is the greatest bar to a subject not
>recognizing the fact that he or she is in fact incompetent.
>
>Several groups of experimental subjects were tested (various IQ,
>achievement, and specific skill-set measuring tools were used) on their
>mathematical, musical, verbal, logical reasoning, visual-spatial, and
>social (listening, empathy, conflict-resolution, humor, assertiveness)
>skills, and then they were interviewed by psychologists and asked to
>give detailed self-assessments of their abilities in each of these
>areas, and to predict how they did on each test (in absolute terms [raw
>score] and also relative to other members of their group).
>
>What they found was interesting, to say the least. Consistently, through
>several repetitions of this carefully designed, well-controlled study of
>over 1000 subjects (male and female, ages ranged approx. 18-75,
>cross-section of incomes, educationa; achievement, occupation,
>ethnicity) it was found that the subjects who scored in the bottom
>quartile (the bottom 25%) in a given assessment measure self-ranked
>themselves in the 70th percentile or above. It gets much more detailed
>and elaborate than this, if you are interested I will dig up the
>reference, I think they have it put up on a web page. But suffice it to
>say that the investigators concluded that by being low-skilled and
>incompetent at say, logic or conflict resolution, this incompetence
>leads people to over-estimate their ability grossly. The skills one
>needs to give an accurate self-assessment are precisely the skills that
>are lacking. This is why we have teachers and evauation tools for
>licenses, school admissions, etc. This is also why the dumb, climbsy,
>and thick-headed (not to mention the ugly) are so confident they are
>geniuses, and happily oblivious to reality. These researchers also found
>the opposite to correlate strongly--high-functioning subjects, those in
>the 90th percentile, almost laways ranked themselves near the 50th
>percentile (thus "average") or lower. Being smart, well-informed, and
>highly-skilled in a given area, or in general, seems to cause such
>people to have rational doubt (i.e. not neurotic ideas that "I am no
>good/no good at _____"). Intelligence and education breed healthy
>skepticism and the semand to be shown, to have a thing demonstrated and
>proved.
>
>I will try to find the URL, or dig out the article and scan it, so that
>all who care to can see the psychology and social-psychology behind the
>behavior of some members of our newsgroup.
>

>de Will KD7BFX
>
>Tom W8JI wrote:
>>
>> On Wed, 6 Sep 2000 14:50:32 -0400, "Dean Craft" <w4ihk@mindspring.com>
>> wrote:
>>
>> >Yea, Steve; quit trying to confuse him with the facts. He already has his
>> >mind made up!
>> >
>> >Dean Craft -- W4IHK
>>
>> Imagine how slow the learning process is when you already think you
>> are smarter than everyone else, and won't answer questions!
>>
>> Now imagine trying to teach, when everything you know is wrong.
>>
>> Now imagine both of those flaws rolled into one persona, and tell me
>> who comes to mind.
>

This has nothing to do with the thread. Would you like me to re-post Will?

73
Chip N1IR

1333. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That The Truly Incompetent Adjudge Themselves To be The Most Competent Alive)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:26:49 UTC
From: 2w8ji@contesting.com
Message-ID: <39b779bb.5801055@news.akorn.net>
Source record: 181499

On Thu, 07 Sep 2000 01:40:58 -0700, Will <wcwhite@mindspring.com>
wrote:

>In a recent (sometime last Spring) study published in Science magazine,
>it was shown that 'incompetence' is the greatest bar to a subject not
>recognizing the fact that he or she is in fact incompetent.
>
Hi Will,

That's an interesting report, and probably explains some of the
behavior we see from our resident newsgroup Dr.

I always assumed he was basically a bright fellow, who stood in his
own way with an inability to exchange information with others. I
thought that was mostly due to an overinflated ego.

Something else is going on, however, because he does a quick back-flip
when some appears that might be able to do him a "favor". Check out
his behavior change now that someone new has appeared on this NG.
Suddenly he is all smiles and other AOL-type Internet Mary Poppins
protocol.

Your report may be right on target.

73 Tom

1334. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:32:41 UTC
From: fractenna@aol.com
Message-ID: <20000907073241.20199.00000007@ng-da1.aol.com>
Source record: 181500

>Richard Clark wrote:
>>
>> On 07 Sep 2000 01:17:58 GMT, maxim1066@aol.com (Maxim1066) wrote:
>>
>> >Thanks for your nice reply, Richard.
>> >
>> >I've changed my screen-name to avoid any harassment. Since I play tennis
>and
>> >like fractals, I thought fractennis would be fun. Wrong! I'm totally
>> >filtering every message generated by that other person. It saves a
>tremendous
>> >amount of time for me.
>> >
>> >I will look at your web page when I get caught up.
>> >
>> >Thanks again,
>> >
>> >Julie
>>
>> Hi Julie,
>>
>> Here is the follow-up re posting relating to my bench work:
>>
>
>Hi Richard,
>
>You might want to take note of the posting host used by
>maxim1066@aol.com. Coincidentally, it's the same host, ...audrey05...
>that fractenna@aol.com often posts from during 'business' hours. From
>what appears to be his home, he usually posts through ...audrey04...
>Rick, k1bqt also posts from audrey04 (or is it 05?). Interestingly, all
>of the suspected aliases for Chip also post from one of the same two
>hosts......
>
>bart
>wb6hqk
>

I strongly am offended by these insinuations Mr. Rowland. I am not ALIASING anyone. And I am NOT k1bqt,.'Julie' or anyone else.

Get a grip.

NC

1335. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:34:27 UTC
From: fractenna@aol.com
Message-ID: <20000907073427.20199.00000008@ng-da1.aol.com>
Source record: 181501

>I can see you've never asked for help from the ARRL! Give that
>a try then tell me about how much good, or how well they represent
>~us~.
> 'Doc

So far, today you've managed to libel Fractal Antenna Systems, Inc., and the League. Who 's next?

NC

1336. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:37:25 UTC
From: fractenna@aol.com
Message-ID: <20000907073725.20199.00000009@ng-da1.aol.com>
Source record: 181502

>K1BQT wrote:

Hey Rick--

Maybe you should explain to Bart Rowland that we aren't aliases of each other...

Chip

1337. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 11:41:10 UTC
From: fractenna@aol.com
Message-ID: <20000907074110.20258.00000002@ng-da1.aol.com>
Source record: 181503

>Fractenna wrote:
>>
>> >Fractenna wrote:
>> >> Rick is right--
>> >> Choke everything, always.
>> >
>> >Except Rick, of course.
>> >
>> Rick is not a 'thing'.
>
>From Webster's: "thing - a spatial entity". Does Rick not occupy
>space? Is Rick not an entity? Aren't human beings living things?
>--
>http://www.mindspring.com/~w6rca
>

C'mon Cecil; I put up with enough abuse for an entire small town. Don't get cute on me.

Chip

1338. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:11:58 UTC
From: w1rfi@aol.com
Message-ID: <20000907081158.16898.00000014@ng-fl1.aol.com>
Source record: 181504

>From: "H. Adam Stevens"

>not quite classical electrodynamics breaks down when the
>frequency is high enough

True enough, but...

>when one gets into the microwave region, quantum mechanics rears it's ugley
>head, so to speak

Microwave is very much below the level at which individual photons have sufficient energy to ionize atoms; in what way is their interaction with matter determined by quantum mechanics?

>photon absorption in water molecule spin states occurs
>one cannot excite a quantum-mechanical transition with photons of
>insufficient energy (frequency) no matter how many one uses (how much power)

Exactly, which is why the absorbtion is purely a matter of heating
.
>the meat may very well cook by other means (currents), much less
>efficiently,

If something is inefficient at turning energy into heat, does it dissapate the ineffeciency as heat? :-)

>but there's a reason for the microwaves, and it's to spin the water molecules

There is no peak near 2.4 GHz in the absorbtion of RF by water vapor in the atmosphere; the peak occurs much higher in frequency. But I would certainly be interested in reading about any published papers about the spin of water molecules by microwaves; can you provide some references? In this area, I certainly have a lot to learn.

>but how many physicists are in this debate among biologists
>who know little of the interaction of radiation with matter
>and lawyers, who know even less

The IEEE committee developing standards includes a wide range of people. Among those people and among the papers being evaluated for future revisions of the standard are physicians, researchers, physicists and even a lawyer or two.

73,
Ed Hare, W1RFI

1339. Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:18:53 UTC
From: w1rfi@aol.com
Message-ID: <20000907081853.16898.00000015@ng-fl1.aol.com>
Source record: 181505

>From: "hasan schiers" schiers@netins.net

>Prairieinet has just announced wireless internet for those of us in rural
>Iowa.

>I'm very interested in signing up but am worried about RF
>interference to and from my ham radio and dbs video distribution equipment
>(it's on 2.4 gig).

I have one report so far of harmful interference to ham radio from high-power 2.4 GHz wireless internet. In that case, the provider actually shut down the offending channels to protect over-the-air service.

I think it unlikely that your transmission will cause damage to their system, but in all proabability, it will bring it to its knees when you are on the air. Under Part 15 rules, they need to accept this interference from a primary user.

I very much want to hear any and all reports of interference to hams from Part 15 devices. Two ARRL Board committees are studying the problem and I want to send them any actual cases.

See http://www.arrl.org/tis/info/part15.html for info on Part 15.

73,
Ed Hare, W1RFI

1340. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:23:12 UTC
From: w1rfi@aol.com
Message-ID: <20000907082312.16898.00000017@ng-fl1.aol.com>
Source record: 181506

>From: CAM cam2338@bigfoot.com

>Say Ed, I've often wondered whether spontaneous human combustion
>might be caused by all the EM signals randomly getting into
>phase with each other for something like a microsecond.

I have always suspected that spontaneous human consumption is related to phase,
but I believe it is the phase of the moon that is the issue. :-)

73,
Ed Hare, W1RFI

1341. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:29:36 UTC
From: fractenna@aol.com
Message-ID: <20000907082936.08240.00000017@ng-mf1.aol.com>
Source record: 181507

>>From: "H. Adam Stevens"
>
>>not quite classical electrodynamics breaks down when the
>>frequency is high enough
>
>True enough, but...
>
>>when one gets into the microwave region, quantum mechanics rears it's ugley
>>head, so to speak
>
>Microwave is very much below the level at which individual photons have
>sufficient energy to ionize atoms; in what way is their interaction with
>matter
>determined by quantum mechanics?
>
>>photon absorption in water molecule spin states occurs
>>one cannot excite a quantum-mechanical transition with photons of
>>insufficient energy (frequency) no matter how many one uses (how much power)
>
>Exactly, which is why the absorbtion is purely a matter of heating
>.
>>the meat may very well cook by other means (currents), much less
>>efficiently,
>
>If something is inefficient at turning energy into heat, does it dissapate
>the
>ineffeciency as heat? :-)
>
>>but there's a reason for the microwaves, and it's to spin the water
>molecules
>
>There is no peak near 2.4 GHz in the absorbtion of RF by water vapor in the
>atmosphere; the peak occurs much higher in frequency. But I would certainly
>be
>interested in reading about any published papers about the spin of water
>molecules by microwaves; can you provide some references? In this area, I
>certainly have a lot to learn.
>
>>but how many physicists are in this debate among biologists
>>who know little of the interaction of radiation with matter
>>and lawyers, who know even less
>
>The IEEE committee developing standards includes a wide range of people.
>Among

>those people and among the papers being evaluated for future revisions of the
>standard are physicians, researchers, physicists and even a lawyer or two.
>
>73,
>Ed Hare, W1RFI
>

If you look at the spectra of various transitions in the atmosphere you see that the spectral lines are very low Q and extremely spread out in frequency. This is caused by collisional broadening.

The reason this is relevant is that water vapor need not be exposed exactly at the 22.235 GHz transition in order for energy to be absorbed, but can be absorbed at frequencies substantially lower.

If quantum mechanical isssues are raised here, let's bring in all the salient effects.

73
Chip N1IR

1342. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:37:10 UTC
From: w1rfi@aol.com
Message-ID: <20000907083710.16898.00000019@ng-fl1.aol.com>
Source record: 181508

>From: 2w8ji@contesting.com (Tom W8JI)

>I would contend that even only 1 or 2 radials or counterpoise wires
>>still make it work acceptably well for most purposes.

>Fact is if you only have a few radials, try to make them resonant and
>keep them away from earth. A marginal ground system can make a
>vertical...especially a short one....loose more than 10 dB of signal.

Even if one could put up 120 half-wave buried radials, often considered to be nearly a perfect ground, the low-angle performance of that vertical is determined by the characteristics of the ground at the point where the reflected ray at the correct downward angle from that antenna reflects. That could be a very long distance from the antenna for very low angles. If he is over an area of poor ground, the vertical may not be a good DX antenna.

That may explain the adage that a vertical antenna is an omnidirectional antenna that radiates equally poorly in all directions. That does NOT apply to vertical antennas with low ground losses that over over very good grounds; in those cases, the vertical does very well indeed.

The bottom line is that a ham is going to put up the best antenna that he or she can and make contacts. If that antenna were only 5% efficient (and it will be much better), it would be the same at the 5 W QRP station into a perfect antenna, and QRPers do it all the time. :-)

73,
Ed Hare, W1RFI

1343. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:54:52 UTC
From: w1rfi@aol.com
Message-ID: <20000907085452.16898.00000025@ng-fl1.aol.com>
Source record: 181509

>From: 'Doc w5lz@oio.net

>Being just me, I was amazed at the 'run around' and
>non-helpful 'help' I received.

Doc, is there anything I can to do help? I would very much like to know what went wrong so I can try to fix it with you and with whatever department messed up, especially if it was mine!

73,
Ed Hare, W1RFI

1344. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 12:57:28 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8p836rijv1@news2.bit-net.com>
Source record: 181510

"Fractenna" <fractenna@aol.com> wrote in message
news:20000906110003.02855.00004615@ng-cg1.aol.com...
> >
> Use your Ph.D. and Cushcraft experience to take the fractal challenge.
Don't
> divert us, please, with inaccurate and incorrect conceptual speculations.
>
> 73
> Chip N1IR
>
>

I thought about this a bit last night and decided to "take the challenge" so that you do not interpret my comments to be speculative and without some factual basis.

Here's one answer of many possible configurations that will have performance characteristics similar to or better than the MI2 Fractal Loop: A helical wound loop with a physical aperture size of 1/8 wavelength by 1/8 wavelength. The helical loop has a helical diameter of about 5 inches with about 20 helical turns per side. Using NEC4 to model the structure, it predicts the resonant frequency to be about 13.56 MHz. This is a lower resonant frequency than the MI2 Fractal Loop (I can change the configuration to match your resonant frequency but thought this to be unnecessary). The predicted resistance at resonance is 33.6 ohms which is closer to 50 ohms than the stated 26 - 30 ohms of the MI2 Fractal Loop. I won't state the antenna bandwidth because I do not know how you define it. Using my crude method of determining radiation efficiency, I predict it to be somewhere around 98% with number 10 wire. The predicted directivity and radiation patterns look very good.

I really have no issue with your claimed performance of the Fractal Loop. The only points with which I have an issue are the claim that the performance is only a result of the Fractal geometry, or that Fractal geometries offer optimum performance in antenna design.

73,
Steve VE9SRB

1345. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:09:04 UTC
From: sideband <sideband@cac.net>
Message-ID: <dq4frscperpg95g54vh4otb4uq9h4ogrg8@4ax.com>
Source record: 181511

I'd comment on this, but I'm busy compiling a new kernel for one of my
Linux boxes. For those interested, 2.2.17 was released a couple days
ago.

73's

-SSB

On or about 07 Sep 2000 00:32:52 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>Anyway, better drop it; I know we are too far afield of antennas now, unless
:>we want to swing it around to some of the smart antenna systems that are
:>being deployed commercially. :-)
:>
:>73,
:>Ed
:
::-)

1346. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:11:53 UTC
From: raiar@slacc.com.nospam
Message-ID: <39b79235.221852449@news.galilei.com>
Source record: 181512

Hi Donnie

The Copper Cactus is my copyrighted antenna plans!

The numbers you gave do not coincide with the Antenna Data for
Constructing the "Copper Cactus Antenna" which in fact uses the
standard wavelength formula x the K-Factor.

Your vertical element is slightly too tall and your stub is slightly
too short to achieve a balance.

Cut about 7/8 off the long vertical element, and install a brass screw
into the pipe cap on the stub and open it about 3 or 4 turns.

This should get it tuned pretty close to right on the money.

The legs of the matching section should allow a 2 inch ball to pass
between them, but this is not a critical measurement, so the 1-1/2
inches you used should be OK.

TTUL
Gary

1347. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:13:33 UTC
From: fractenna@aol.com
Message-ID: <20000907091333.20767.00000020@ng-cf1.aol.com>
Source record: 181513

>The only points with which I have an issue are the claim that the
>performance is only a result of the Fractal geometry,

...which is true;

or that Fractal
>geometries offer optimum performance in antenna design.
>

In most cases that is correct.

73
Chip N1IR
>73,
>Steve VE9SRB
>

1348. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:19:14 UTC
From: fractenna@aol.com
Message-ID: <20000907091914.20767.00000021@ng-cf1.aol.com>
Source record: 181514

>Here's one answer of many possible configurations that will have performance
>characteristics similar to or better than the MI2 Fractal Loop: A helical
>wound loop with a physical aperture size of 1/8 wavelength by 1/8
>wavelength. The helical loop has a helical diameter of about 5 inches with
>about 20 helical turns per side. Using NEC4 to model the structure, it
>predicts the resonant frequency to be about 13.56 MHz. This is a lower
>resonant frequency than the MI2 Fractal Loop (I can change the configuration
>to match your resonant frequency but thought this to be unnecessary). The
>predicted resistance at resonance is 33.6 ohms which is closer to 50 ohms
>than the stated 26 - 30 ohms of the MI2 Fractal Loop. I won't state the
>antenna bandwidth because I do not know how you define it. Using my crude
>method of determining radiation efficiency, I predict it to be somewhere
>around 98% with number 10 wire.

If you predict then you don't know.

The predicted directivity and radiation
>patterns look very good.
>

Nope. You did something wrong in your calculations. It is not effficient and
the gain stinks. Been there done that. Even fractalized many.

But if you submit it I will be happy to give you some feedback and you can
tweak before 'officially submitting'. Remember: EZNEC file .

73
Chip N1IR

1349. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:35:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <8YTsdNAEm5t5Ewij@ifwtech.demon.co.uk>
Source record: 181517

sideband wrote:
>Is the use of a Balun REALLY necessary on a dipole? I've got 50 ohm
>coax going out to a dipole on the back of my car, and I'm wondering if
>a 1:1 balun would really make any difference in regards to the
>antenna's performance. I've got a good SWR (1.3:1 across most of the
>CB band, where I'm legal to transmit), and I've never noticed any
>performance problems.
>
>Will adding a 1:1 balun hurt? Will it help the antenna radiate any
>better?
>
>I've never played with a balun, but I was doing some reading, and most
>sites on the 'net seem to agree that a balun is a "should do" for any
>dipole. But if a good SWR is attained without one, are they REALLY
>necessary? Opinions?
>

Yes, it's a "should do".

The problems with "if it works without a balun, don't fix it" is that by leaving the balun out, you risk causing RFI due to feedline radiation. It's liable to be your family and neighbors who find out if you need a balun or not. IMO that's an irresponsible attitude towards other people, as well as being lousy RF engineering. Prevention is better than cure.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1350. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:56:10 UTC
From: k6mhe@arrl.net
Message-ID: <39b79d6d.2157612@news.mcn.org>
Source record: 181421

On 07 Sep 2000 12:50:17 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: richardharrison@webtv.net (Richard Harrison)
>
>>ARRL deserves dismissal for its counterproductivity.
>
>Now that I have been dismissed, can we assume that you will take over the work
>I have been doing?
>
>You will need to contact and work with the following to be current:
>
>IEEE SCC-28
>IEEE/ANSI C.63
>SAE EMC/EMR Committee
>Home Phone Networking Alliance
>HomePlug
>TIA VDSL committee
>AT&T/Phonex
>Society of Cable Telcommunications Engineers
>FCC OET
>Several dozen electric utility companies
>
>I will provide you a more complete list and the lists of other organizations I
>am just now initiating contact with to work on RFI problems. I am sure that
>everyone will appreciate the work you are about to do.
>
>73,
>Ed Hare, W1RFI

Ed,

Looking at your list reminds me of all the committees that were formed
to combat YK2. Which was another non-event.

It is hard to believe that amount of time and money being wasted on
preventing a *supposed* problem.

73
Danny, K6MHE

1351. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 13:57:31 UTC
From: k6mhe@arrl.net
Message-ID: <39b89e9d.2461342@news.mcn.org>
Source record: 181422

On Thu, 07 Sep 2000 00:11:55 -0500, CAM <cam2338@bigfoot.com> wrote:

>'Doc wrote:
>>
>> Jeff,
>> A coaxial balun will work, but don't count on covering the
>> whole 75/80 meter band with one antenna, at least without a
>> tuner.
>
>I cover the entire 75/80m band without a tuner by varying the
>length of my ladder-line from 90ft to 110ft.

Which is, in fact, just another method of tuning the antenna system.

73
Danny, K6MHE

1352. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:11:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7A1F4.A143788B@bigfoot.com>
Source record: 181515

Fractenna wrote:
> >> >Fractenna wrote:
> >> Rick is not a 'thing'.
> >
> >From Webster's: "thing - a spatial entity". Does Rick not occupy
> >space? Is Rick not an entity? Aren't human beings living things?
>
> C'mon Cecil; I put up with enough abuse for an entire small town. Don't get
> cute on me.

It wasn't abuse, Chip, it was tongue-in-cheek humor. Humor is a great
tool for diffusing certain situations.
--
http://www.mindspring.com/~w6rca

1353. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:15:32 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8p87p0$jq3$1@news2.bit-net.com>
Source record: 181368

"Fractenna" <fractenna@aol.com> wrote in message
news:20000907091914.20767.00000021@ng-cf1.aol.com...
>
>
> If you predict then you don't know.
>

The results of all antenna modeling programs are "predictions" based upon mathematical equations and assumptions about current distribution over small wire segments. My predicted efficiency is based upon an analysis (although a somewhat simplistic one). Perhaps I should have said "calculated". Would that have helped you any? Or better yet, how do you "predict" radiation efficiency?

> The predicted directivity and radiation
> >patterns look very good.
> >
>
>
> Nope. You did something wrong in your calculations. It is not effficient
and
> the gain stinks. Been there done that. Even fractalized many.
>
> 73
> Chip N1IR

You have not seen my NEC model and you have not seen the output files or the NEC calculated patterns. Given these facts, how could you even make a statement that I did something wrong in my calculations? NEC did the calculations, I simply prepared the input geometry. To make a statement that I did something wrong in my calculations without seeing the antenna geometry or the NEC results is presumptuous and arrogant. Do you always dismiss an other persons results and opinions simply because they disagree with you? The statements that you made above demonstrate a serious lack of professional integrity.

73,
Steve, VE9SRB

1354. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:15:51 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7A317.80F851DD@bigfoot.com>
Source record: 181516

N8wwm wrote:
> I have never seen a more screwed up gut than Chip...i swear

Please present evidence that you have ever seen Chip's gut.
--
http://www.mindspring.com/~w6rca

1355. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:27:41 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7A5DD.27A2914C@bigfoot.com>
Source record: 181419

'Doc wrote:
>
> CAM wrote:
> > I cover the entire 75/80m band without a tuner by varying the
> > length of my ladder-line from 90ft to 110ft.
>
> And by doing so you are 'tuning' your feedline. What's the
> difference? Personally, I'd rather do it from the operating
> position with the tweek of a knob...

The difference is I can run 500 watts without owning a 500 watt tuner. Compare the cost difference between 20 feet of ladder-line and a 500 watt tuner. And I do the tuning from the operating position with the tweek of a couple of (digital) knife switches, easier than mucking with three (analog) knobs on a tuner.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1356. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:31:44 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8p88nc$k1i$1@news2.bit-net.com>
Source record: 181437

"Fractenna" <fractenna@aol.com> wrote in message
news:20000907091333.20767.00000020@ng-cf1.aol.com...
> >The only points with which I have an issue are the claim that the
> >performance is only a result of the Fractal geometry,
>
> ...which is true;
>
> or that Fractal
> >geometries offer optimum performance in antenna design.
> >
>
> In most cases that is correct.
>
> 73
> Chip N1IR
> >73,
> >Steve VE9SRB
> >
>

How do you expect to be taken seriously by a professional community when your only position is "I am always right and everyone else is always wrong."

You have asked this NG to submit EZNEC models to you for evaluation. Why?? I state results of a NEC model and you dismiss them without even seeing the file with a statement "you did the calculations wrong - been there done that." Are you presuming to tell this NG and the antenna community in general that you have modeled every possible antenna configuration ever conceived or ever to be conceived and that your Fractal designs are the ultimate and best designs possible and that nothing else has or will ever will come close in performance? Your statements sure sound like this is your position.

Given your position, you should be willing to e-mail me your EZNEC model and let me look at. Will you or do you have something to fear? If you do, I will be more than happy to share mine.

73,
Steve, VE9SRB

1357. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:31:51 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8p88sn$68o$1@uni00nw.unity.ncsu.edu>
Source record: 181448

Mark Keith <nm5k@wt.net> wrote:
>> > ..... If you use full size verticals or at least try to
>> > use one that is fairly efficient, and use the proper number of radials
>> > for the height in wavelength they work great.
>>
>> I would contend that even only 1 or 2 radials or counterpoise wires
>> still make it work acceptably well for most purposes.

> It will make the antenna "work" just fine, but does little to reduce
> ground losses if the antenna is low to the earth. With an elevated
> vertical that is fairly high, then what you say is fairly true. Except
> for a slight skewing of the pattern from a circle. If the vertical was
> ground mounted or low in height "wl" this wouldn't be the case. The
> antenna works fine, but ground losses still are quite large, so
> improvement can be had. MK

Agreed. I think the gentleman was really asking for a usable antenna
as opposed to a contesters tuned for blood and guts style antenna.
My point was that even a very little bit of antenna, in this case
a ground plane with significantly less than the recommended numbers
of radials (to contesters or DXers), it would work well and allow
him to get a goodly number of QSO's.

>> > If you really want
>> > good performance for a limited number of radials, I would elevate it. I
>> > can tell you, if you only run a dipole on 160/80/40 that is low in
>> > height, going to a good vertical will change your mind about these.
>>
>> I agree, but would suggest that even a vertical 1/4 wave cut for 40M,
>> for example hung 45 foot up, with only 2 sloping ground plane wires
>> will work acceptably well. I ran one of those (patterned after that
>> simple cheapie 2M thing but scaled up for 40M) for a long time, and
>> it did respectably well out to 4000 miles or so. It would not compete
>> with the 1000 radial things, but heck, I was not after that kind of
>> performance, just a simple working antenna. It only requires a
>> tree about 45-60 feet high, and away you go. It has some directivity
>> due to the odd lobing because of insufficient ground plane, but you
>> can point that in the direction of interest.

> Yep, I can agree with that. Two radials at 45 ft would do fairly decent.
> But I'd still try to use at least 3 and preferably 4 minimum just to
> ensure good balance, and maybe a bit better decoupling from the coax.
> I've used a few tree hung wire verticals that did pretty well. But my
> present one is a 32 ft self supporting aluminum whip made from old junk
> antennas. It's pretty light, and can bend real well in heavy winds. In

> 50-60 mph winds I've seen it almost horizontal but it always snaps back
> later. It doubles as a 5/8 GP for 17m. I also use 1/4 verticals for
> receiving WEFAX. One of the ones I mentioned that was against a wood
> fence was for 8 mhz WEFAX use. I'm guessing they may transmit vertical
> from Norfolk, but whatever, it was by far better for fax than any of the
> dipoles. Running vertical always gave me a cleaner picture. MK

My point in trying the enlarged 2M 2-radial ground plane was to see if
it would even work. It did, rather well.

Verticals, even simple ones, can and do work better than many folks would
say they do. I would consider them definitely worth trying, as opposed
to the usual dipole, and even in addition to the usual dipole. If one
can`t get the 200 radial monster set up, then even 1/2/3/4 radials can
suffice, rather well for most generic ham purposes. It may not be the
contesters or DXers most desireable vertical, but they do work and are
simple to throw up. A newbie or anyone wanting a good general purpose
antenna should seriously consider them, even simple ones. Oftentimes,
one does not need the blood-and-guts versions of a vertical, to get
perfectly fine and enjoyable ham operating.

Bob/NA4G

1358. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:34:47 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8p88t3$k47$1@news2.bit-net.com>
Source record: 181420

"Fractenna" <fractenna@aol.com> wrote in message
news:20000907091914.20767.00000021@ng-cf1.aol.com...
>
>
> If you predict then you don't know.
>

The results of all antenna modeling programs are "predictions" based upon mathematical equations and assumptions about current distribution over small wire segments. My predicted efficiency is based upon an analysis (although a somewhat simplistic one). Perhaps I should have said "calculated". Would that have helped you any? Or better yet, how do you "predict" radiation efficiency?

> The predicted directivity and radiation
> >patterns look very good.
> >
>
>
> Nope. You did something wrong in your calculations. It is not effficient
and
> the gain stinks. Been there done that. Even fractalized many.
>
> 73
> Chip N1IR

You have not seen my NEC model and you have not seen the output files or the NEC calculated patterns. Given these facts, how could you even make a statement that I did something wrong in my calculations? NEC did the calculations, I simply prepared the input geometry. To make a statement that I did something wrong in my calculations without seeing the antenna geometry or the NEC results is presumptuous and arrogant. Do you always dismiss an other persons results and opinions simply because they disagree with you? The statements that you made above demonstrate a serious lack of professional integrity.

73,
Steve, VE9SRB

1359. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:54:55 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B7AC3F.3F637E81@bigfoot.com>
Source record: 181423

Dan Richardson wrote:
>
> On Thu, 07 Sep 2000 00:11:55 -0500, CAM <cam2338@bigfoot.com> wrote:
> >I cover the entire 75/80m band without a tuner by varying the
> >length of my ladder-line from 90ft to 110ft.
>
> Which is, in fact, just another method of tuning the antenna system.

Yep, but 20ft of ladder-line costs three dollars while a 500 watt tuner
costs 100 times as much. Seems like a no-brainer to me. :-)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1360. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:55:20 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39B7AC58.2781E494@my-deja.com>
Source record: 181425

Jeff Goodspeed wrote:
>
> Iï¿½m procrastinating putting up a wire antenna for 80/75 meters.
> The antenna will only be used on this one band. I am considering
> several antenna types and I intend to feed it using 50-Ohm coax.
> Some designs require a 4:1 balun. For decades, I have seen a
> 4:1 balun described which used a 1/2 wave loop of coax to
> accomplish the impedance step up:
>
> O O
> _|_ |
> | | |
> | | |
> | | | <-- 1/2 wave
> | | |
> | | |
> | |__|
> |
> |
>
> Has anyone ever used this homebrew balun? Does it eliminate
> current from flowing down the outside of the feed line? Is
> the performance bandwidth wide enough to cover all of 80/75 m?
> Can 75-Ohm coax (RG-11) be used for the ï¿½ wave loop if the
> rest of the feed line is 50 Ohm (RG-213)? (Iï¿½m cheep and
> I have some RG-11 lying around)
>
> The weight and size of such a large coil of coax is not an
> issue for me as the feed point will be at my tower and not
> suspended in mid-air.
>
> What do you guys think?
>
> Jeff ï¿½ KA9S

Jeff,

I have used that type of balun, but only on 10 Meters and up.
I never even considered using it on that low a frequency because
of the sheer bulk. However, when I did use one it was usually for
matching between a folded dipole and a coax feed.

It seemed to work well, bringing the 300 ohm feed impedance of
a folded dipole down to around 75 ohms and converting the
unbalanced input to balanced.

I would think that the bandwidth would be a problem. A much
better choice is a nice broadband toroidal balun, if you really
intend to cover the whole band.

As long as you are still considering different types of wire
antennas, you might want to look at a broadband coaxial feed dipole
that is described in the 1999 ARRL Handbook. A more detailed
description, with all the formulas, is also in the Antenna
Compendium Vol 2 (or is it 1 ?? I forget.).

The antenna itself is actually a off center fed dipole that
uses coax as a matching element. The design is such that
the horizontal portion is made up of several sections of coax
and lengths of wire. It is fed directly with 50 ohm coax.

The one described in the handbook is for 80/75 Meters but
I made one that was scaled to 40 meters. Although I can't
attest to it's efficiency, it seemed to work very well.
For 80/75 Meters, the antenna had a very wide bandwidth.
My 40 Meter version is still in use, at a friends house.

Martin K7MEM

--
Martin E. Meserve K7MEM, ex KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1361. New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 14:59:21 UTC
From: SMB <scott.m.bowen1@jsc.nasa.gov>
Message-ID: <8p8ag5$p5a@niven.ksc.nasa.gov>
Source record: 181424

I just got my first rig, a Yeasu FT-1500M as a gift and I want to build a J-pole antenna. I live in a jack-booted thug subdivision that has antenna restrictions, so I figure a J-pole made from .5" copper tubing, painted flat black and mounted to a vent pipe on the back side of the roof should be OK. I made the antenna and I have some questions about tuning it...

Is there a good place to start, meaning, where should I put the connections to start with?

Are the J-pole designs hard to get tuned?

Does anyone have any other suggestions for stealthy antennas that perform well?

thanks,

Scott

1362. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:04:11 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8p8apb$8dk$1@uni00nw.unity.ncsu.edu>
Source record: 181450

W1RFI <w1rfi@aol.com> wrote:
> The bottom line is that a ham is going to put up the best antenna that he
> or she can and make contacts. If that antenna were only 5% efficient (and
> it will be much better), it would be the same at the 5 W QRP station into
> a perfect antenna, and QRPers do it all the time. :-)

Well said. Considering that most folks (aside from the diehard QRP types)
are going to run 50-150 watts, then even a less-efficient vertical, say
25-50% efficient, can put out a respectable signal and may be entirely
practical and acceptable to a given ham. Sure, it ain't perfect, but
it will work, and make lots of QSO's. The point is that one does not
always need the perfect antenna, even if it were available. Under
average conditions, +-3 or even +-10db is not a problem. If one can
hear it, one can usually work it (pileups and contests aside --- for
those you always will need the biggest bang for the buck horsepower).
Then there is the other side, too, that IFF I can squeeze one more iota of
ether out of the silly thing, I might go ahead and add another 100 radials.
That is a ham tradition of tinkering that goes back to the very beginnings.
It becomes a how serious do you want to get and how much are you willing
to invest into the thing proposition. I have gotten entirely acceptable
use, over the past 30 years on the air, of even the simplest sorts of
vertical antenna. You just gotta learn how to make them work. The
skill becomes in how you operate the thing rather than in the megadb
of signal you put out. But, I would never poopoo even a simple vertical
as being a lesser sort of antenna, compared to a dipole. My experiences
would rate them on an equal basis, with nuances associated with each.
On HF, a vertical is always a good bet in my book.

Bob/NA4G

1363. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:10:16 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7ad0f.18943403@news.akorn.net>
Source record: 181426

Hi Ed,

Nice to see you contributing. The newsgroup seems to be more settled
for some reason with you here, that's great.

On 07 Sep 2000 12:37:10 GMT, w1rfi@aol.com (W1RFI) wrote:
>
>Even if one could put up 120 half-wave buried radials, often considered to be
>nearly a perfect ground, the low-angle performance of that vertical is
>determined by the characteristics of the ground at the point where the
>reflected ray at the correct downward angle from that antenna reflects. That
>could be a very long distance from the antenna for very low angles. If he is
>over an area of poor ground, the vertical may not be a good DX antenna.

I live in Georgia, an area noted for poor soil. I have a 200 foot
tower with 100 200 foot (or so) radials.

I have a 318 foot tower, with a dipole (droopy dipole, ends are about
250 feet or so high).

In hundereds of A-B tests on 160 meters, the dipole and vertical are
either the same...or the vertical is a bit better. That's broadside to
the dipole, of course off the ends the vertical is substantially
better.

That was true at any distance beyond a few hundred miles, the main
exceptions occured during geomagnetic storms or at sunrise "peaks".

I had similar results on 80, with a dipole just under 1/2 wl high,
except the dipole was generally better within a thousand miles on 80.
Outside that, they were about even.

The worse investment I ever made in improving my signal was the 300
foot tower, but it turned out to be the most educational!

N6RK has done extensive comparisons on other bands. The data is on his
web page.

Never underestimate what a vertical a good system can do on the lower
bands!

73 Tom

1364. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:16:08 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7aff0.19680227@news.akorn.net>
Source record: 181427

On Thu, 07 Sep 2000 09:11:00 -0500, CAM <cam2338@bigfoot.com> wrote:

>It wasn't abuse, Chip, it was tongue-in-cheek humor. Humor is a great
>tool for diffusing certain situations.
>--
>http://www.mindspring.com/~w6rca

Knock off the abuse. He's had his phil of abuse, especially the
tounge-in-cheek kind, and decided to sit it out for awhile.

1365. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:25:53 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7b19a.20106114@news.akorn.net>
Source record: 181428

On 07 Sep 2000 14:44:06 GMT, k1bqt@aol.com (K1BQT) wrote:

>Most of us know "real-world" ham friends who run power at HF, but manage to
>knock out the phones and most of the processor-driven electroincs in their
>houses because some of the energy earmarked for the antenna terminals doesn't
>get there. The paper may say the station is in full compliance, but RF levels
>in the building may say otherwise.
>
>Rick K1BQT

Hi Rikki...

Please take a look at the field strength required to exceed exposure
limits.

One chicken little is enough, we don't need big bird chiming in with
needless warnings.

I might have a problem if I sat on a small loop antenna, especially an
ultra efficient fractal M-16 loop, but not with normal antennas.

I serious dounb't you could get enough RF back in your shack to from
the simple lack of common mode suppression on the feedline.

1366. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That The Truly Incompetent Adjudge Themse

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:30:49 UTC
From: k1bqt@aol.com
Message-ID: <20000907113049.23376.00000009@ng-cb1.aol.com>
Source record: 181429

In the post-war era, "competitive mastery" was the dominant philosophy of education in this country. In the '60s, this philosophy changed, as social and political pressure built to promote "equity" and "positive self-regard" as fundamental values. Sadly, the Fed and pop psychology mainlined that approach right into the nation's classrooms through the 70s and 80s. The study Will mentions is often cited as a measure of our "success" in that arena!

RIck K1BQT

1367. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:33:55 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7b406.20726597@news.akorn.net>
Source record: 181430

On Thu, 7 Sep 2000 10:34:47 -0400, "VE9SRB" <srbest@worldnet.att.net>
wrote:
>calculations, I simply prepared the input geometry. To make a statement
>that I did something wrong in my calculations without seeing the antenna
>geometry or the NEC results is presumptuous and arrogant.

>Do you always
>dismiss an other persons results and opinions simply because they disagree
>with you?

>The statements that you made above demonstrate a serious lack of
>professional integrity.

Now that you have met Dr. Cohen, and started to understand him, maybe
you will want to market some of his inventions?

73 Tom

1368. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:37:17 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7b577.21095757@news.akorn.net>
Source record: 181431

On 07 Sep 2000 11:32:41 GMT, fractenna@aol.com (Fractenna) wrote:

>I strongly am offended by these insinuations Mr. Rowland. I am not ALIASING
>anyone. And I am NOT k1bqt,.'Julie' or anyone else.
>
>Get a grip.
>NC

Hi Bart,

May I respectfully suggest you follow "NC's" suggestion, and get a
grip?

If you do so, and if your grip is powerful enough and reaches far
enough to the east, you can do all of us a favor!

73 Tom

1369. Re: Diople, Diople, which dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 15:44:59 UTC
From: WALTERB@prodigy.net
Message-ID: <8p8cvo$70us$1@newssvr05-en0.news.prodigy.com>
Source record: 181432

Hi,
After doing some checking i brought a Alfa Delta 10 through80 meter Dipole
it cost about 120 bucks and works on all bands with my Kenwood 570D but will
work on 10-15 -20-40-80meters
without a tuner, Ive had it up for over 2 years and i love it.
73s.....KB6HRT.....
PacerAl <paceral@aol.com> wrote in message
news:20000825191434.02089.00000195@ng-cd1.aol.com...
> Just got my general and want to get on HF bands. Looking at putting up an
off
> center dipole for 10,15,20, and 40 meter as described in the Feb 1996
issue of
> QST (pg. 65). In this setup it calls for a length of 55ft of 450 ohm
ladder
> line into the shack with connection to the radio through a 1:1 Balun for
15
> meter and a 4:1 Balun for 40.20, 10. Would have to change Baluns for the
2
> FREQ ranges. Connection between Balun and radio with short piece of 50
ohm
> coax. The Carolina Windom 40 uses this type-offset dipole but utilizes 10
ft of
> ladder line with two "special" line isolators. I'm looking for some
words of
> wisdom as to what direction to go and the benefit of using an offset
dipole
> with ladder line vs. a STD dipole with equal legs and coax feed line w/o
any
> ladder line. I will be using a MFJ 940B tuner. After reading some of the
> responses on this newsgroup I feel confident I will get some good advice
>
> 73 al KF4OUA
>

1370. FA MFJ 259-B +ACCESS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:00:45 UTC
From: chris fox ni4l <cfox007@bellsouth.net>
Message-ID: <39B7BBAD.D19A49CA@bellsouth.net>
Source record: 181433
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.boatanchors

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=430523824
ITEMS JUST LIKE NEW
PLEASE TAKE A LOOK AT MY OTHER AUCTIONS THANKS

1371. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:03:45 UTC
From: k1bqt@aol.com
Message-ID: <20000907120345.22270.00000035@ng-cu1.aol.com>
Source record: 181434

>I might have a problem if I sat on a small loop antenna, especially an ultra efficient fractal M-16 loop...<

There's a plan!

I think this RFI exposure thing is a bunch of hooey anyway. What I'm really griping about is my personal bias against simulations that don't include all the relevant variables. Or, perhaps I'm just coming down with a cold and feeling a little cranky today.

--Rick K1BQT

1372. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:10:28 UTC
From: k1bqt@aol.com
Message-ID: <20000907121028.22270.00000036@ng-cu1.aol.com>
Source record: 181435

Hi Tom--

Then again, perhaps I'm smelling opportunity and money. There is, after, a lot more cash to be made by promoting hysteria than by promoting the facts. If you don't believe me, just ask the news director at your local television station!

Rick K1BQT

1373. Re: New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:23:06 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <KhPt5.159312$c5.4178571@news2.rdc1.on.home.com>
Source record: 181436

SMB <scott.m.bowen1@jsc.nasa.gov> wrote in message
news:8p8ag5$p5a@niven.ksc.nasa.gov...
> I just got my first rig, a Yeasu FT-1500M as a gift and I want to build a
> J-pole antenna. I live in a jack-booted thug subdivision that has antenna
> restrictions, so I figure a J-pole made from .5" copper tubing, painted
flat
> black and mounted to a vent pipe on the back side of the roof should be
OK.
> I made the antenna and I have some questions about tuning it...
>
> Is there a good place to start, meaning, where should I put the
connections
> to start with?
>
> Are the J-pole designs hard to get tuned?
>
> Does anyone have any other suggestions for stealthy antennas that perform
> well?
>

How about building a 2 meter 1/4 wave ground plane antenna into a birdhouse
(build bird house around antenna) and then putting it up on a hollow
aluminum pole and feed the coax inside the pole. Do they allow bird houses?
Do you have and attic or dead space under the roof mount your antenna up
there.

Barry D.

1374. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:46:53 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8p8h6u$3a3$1@nntp9.atl.mindspring.net>
Source record: 181438

VE9SRB wrote in message <8p88t3$k47$1@news2.bit-net.com>...
>
>
>
>You have not seen my NEC model and you have not seen the output files or
the
>NEC calculated patterns. Given these facts, how could you even make a
>statement that I did something wrong in my calculations? NEC did the
>calculations, I simply prepared the input geometry. To make a statement
>that I did something wrong in my calculations without seeing the antenna
>geometry or the NEC results is presumptuous and arrogant. Do you always
>dismiss an other persons results and opinions simply because they disagree
>with you? The statements that you made above demonstrate a serious lack of
>professional integrity.
>
>73,
>Steve, VE9SRB
>
>
>
>
>

You just about have it figured out!

Dean Craft -- W4IHK

1375. Re: New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 16:58:25 UTC
From: SMB <scott.m.bowen1@jsc.nasa.gov>
Message-ID: <8p8hfb$6fe@niven.ksc.nasa.gov>
Source record: 181440

Barry D <x123x123@yahoo.com> wrote in message
news:KhPt5.159312$c5.4178571@news2.rdc1.on.home.com...
> SMB <scott.m.bowen1@jsc.nasa.gov> wrote in message
> news:8p8ag5$p5a@niven.ksc.nasa.gov...
> > I just got my first rig, a Yeasu FT-1500M as a gift and I want to build
a
> > J-pole antenna. I live in a jack-booted thug subdivision that has
antenna
> > restrictions, so I figure a J-pole made from .5" copper tubing, painted
> flat
> > black and mounted to a vent pipe on the back side of the roof should be
> OK.
> > I made the antenna and I have some questions about tuning it...
> >
> > Is there a good place to start, meaning, where should I put the
> connections
> > to start with?
> >
> > Are the J-pole designs hard to get tuned?
> >
> > Does anyone have any other suggestions for stealthy antennas that
perform
> > well?
> >
>
> How about building a 2 meter 1/4 wave ground plane antenna into a
birdhouse
> (build bird house around antenna) and then putting it up on a hollow
> aluminum pole and feed the coax inside the pole. Do they allow bird
houses?
> Do you have and attic or dead space under the roof mount your antenna up
> there.
>
> Barry D.

thanks for the reply Berry!

Yup, I can do a birdhouse, and I have a tall attic, but I was concerned
about RFI in the house if the antenna is in the attic.

Is a 1/4 wave ground plain a great performer? I have heard and studied that
with 2m and other VHF-UHF, higher is better.

Thanks,

Scott
KD5KZN

1376. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:00:12 UTC
From: k1bqt@aol.com
Message-ID: <20000907130012.22270.00000040@ng-cu1.aol.com>
Source record: 181439

>Rick, k1bqt also posts from audrey04 (or is it 05?). Interestingly, all of the suspected aliases for Chip also post from one of the same two hosts......<

Ever wonder why K1BQT hasn't appeared at Dayton or Boxboro lately? Fact is, "the poor old geezer slipped and fell into the freezer", as they say--and I've been aliasing his entire life in one short 10-minute-a-day workout for over three years! The controversial posts...the fights...the smart-ass remarks...those ham products ....the magazine articles...ALL MINE, in my spare time, and with with one hand tied behind my back! And you think I'm not a clever fellow, Mr. Rowlett?

1377. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:03:41 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <aWPt5.565$u95.1473855@news.ntplx.net>
Source record: 181441

K1BQT <k1bqt@aol.com> wrote:

> Fact is, these RF- exposure pencil and paper compliance calculations are
> totally worthless unless all station feedlines are all dead cold (and
that's
> rarely the case)!

Yes, it is rarely the case, but let's analyze a single nearly worst case to estimate how much of a problem this might be.

I just modeled the following, over average ground. A random wire with a 30-foot vertical section and a 120-foot horizontal section. In this case, the vertical section is as much a radiating part of the antenna as is the flat top. I used EZNEC to calculate the near electric field, at a height of 72" from ground, starting right at the vertical section and going out directly under the horizontal section. The controlled exposure limit is 61.4 V/m on the 10 meter band. At 1 kW continuous carrier, EZNEC predicts that the level of E field will drop below 61.4 V/m at a horizontal distance of 31 inches from the radiating vertical section. At 1500 W conversational CW, I calculate 600 W average power (1500W * 40% * 100% on/off time in 6 minutes). EZNEC predicts that the near field will drop below 61.4 V/m 24 inches from the radiating vertical element. If a ham runs an end-fed wire into his or her shack, this about the distance I would expect between the wire and the operator. Now, I chose 6 feet as a typical exposure height. The worst case E field exposure in this case turns out to be at a height of 16" above the ground. At that point, the required distance for 1500 W conversational CW turns out to be 47".

Keep in mind that this is really as bad as it can get. Though no feed line is "dead cold," would you estimate a pretty worst case *for cases where a ham is not getting RF in the shack problems* to be -10 dB? Dean Straw has done some EZNEC analysis of the common-mode signal in feedlines from badly unbalanced antenans and typically found them to be much better than -10 dB. But even taking -10 dB as a figure, the power radiated by the feed line would not be 1500 W conversations CW (600 W average power), but 60 W average power. This gives 20 inches compliance distance *at the worst point of my above model*, so even if a ham has a pretty leaky feed line, if is it 20 inches away from controlled exposure, it is okay. The uncontrolled limit is about 28 V/m, and EZNEC gives a required distance at 60 W average power of 37 inches for this really badly unbalanced feed line. At these distances, one is in the radiating portion of the near field, so the contribution from that nearest section of radiating feed line will decrease as 1/D. (The other sections of feedline and the radiating part of the antenna will add or subtract from that at any point; one is in the near field, but the point is that at the distance one must be to be below the limit from the antenna, a

badly radiating feed line is not affecting the RF at that point very much, as a rule.)

And, don't forget, that RF calculator is NOT the only factor that hams can use or necessarily consider. A ham who believes that feed line radiation could be a problem at his or her station should consider that as he or she does the needed station evaluation. The FCC has confidence that hams, individually, or collectively through discussions like this, will indeed consider the factors necessary to do a reasonable evaluation. I agree that feed line radiation could be a factor, but in light of the above analysis, I do not believe that the estimates from the various calculational methods of doing an evaluation are worthless.

>
> Go to any commercial communications show, and you'll see vendors selling
> exposure meters that actually measure what's happening at the transmitter
or
> operating site. Hams, on the other hand, who are often far less
sophisticated
> in their "site engineering" skills, have no such gizmo to check reality.
>
> What's with that? Cardboard calulators and pencil charts may help us
determine
> if our stations are potentially in compliance. But without an actual
> measurement on each band, what do we really know! Straighten me out--am I
> being stupid or are we missing the obvious here?
>
> Rick K1BQT
>

1378. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:08:19 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <v_Pt5.566$u95.1473986@news.ntplx.net>
Source record: 181442

K1BQT <k1bqt@aol.com> wrote:

> I think this RFI exposure thing is a bunch of hooey anyway.

At the levels of the standard, one does not expect to see problems. If the standard was set high enough that it wasn't hooey, I don't think it would be a very good standard.

>What I'm really griping about is my personal bias against simulations that don't include all
> the relevant variables.

Let's define relevant. If I use the RF calculator and determine that my neighbors need to be 33 feet from my antenna, and they are 133 feet from my antenna, have I not considered everything relevant? At 1/D for field strength, the feed line could not be contributing enough to push me over the limit. If I found I needed 33 feet and I had 34 feet between my antenna and my feed line was right next to my neighbor's balcony, I would know I had a bit more work to do.

>Or, perhaps I'm just coming down with a cold and feeling a little cranky today.

Rick Littlefield being cranky? Naw, could never happen. :-)

73,
Ed Hare, W1RFI

1379. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:11:48 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <L1Qt5.567$u95.1474062@news.ntplx.net>
Source record: 181443

CAM <cam2338@bigfoot.com> wrote:

> It wasn't abuse, Chip, it was tongue-in-cheek humor. Humor is a great
> tool for diffusing certain situations.

Yeah, Cecil, but the butt of the joke sometimes sees the humor a bit
differently than the ones that are rotf. :-)

73,
Ed Hare, W1RFI

1380. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:33:26 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <2mQt5.568$u95.1474837@news.ntplx.net>
Source record: 181444

Tom W8JI <2w8ji@contesting.com> wrote:

> Nice to see you contributing. The newsgroup seems to be more settled
> for some reason with you here, that's great.

I periodically look at rraa and when I saw RFI and RFX issues on the table, I felt I could make a contribution, so I chimed in. In many ways, with some of the names I recognize here, I feel I am in with some pretty knowledgeable folks, many of whom are a lot smarter than I am, so I stand to learn a lot and to more than once have someone add a lot to, or even correct, what I have to offer. I don't think any of us have all the answers and if people can add to, or correct, or even post opposing views, I feel that the value of discourse far outweighs my own feelings or even the risk of posting something that gets corrected.

As a young lady said to me once in a bar in East Hartford, one does not put the puzzle together by keeping all the pieces in the box. Sure wish it didn't take me so long to figure it out. :-)

As to "settled," probably a coincidence. I am no better at antennas that most, and less able than others, so I am just another ham playing in a fun forum. If I have brought any calm, it may not last; I will try to conduct myself in a way that honors the traditions of amateur radio, and discuss ideas, not personalities, but sometimes the presence of an ARRL staffer tends to bring out some bad things all on their own. I hope that folks will see most of my being here from time to time as personal; my boss does not ask me to get on various fora and enter into discussions, but he doesn't mind if I do (as long as I don't undermine my employer in the process).

But speaking of which, lunch break is over, so I will have to cut this one short, so I will pick up on the vertical/horizontal issue later. :-) Mark this one unread.

73, Ed Hare

1381. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:34:44 UTC
From: rwclark@seanet.com
Message-ID: <39b7bc94.608504@news.seanet.com>
Source record: 181445

On Thu, 7 Sep 2000 10:34:47 -0400, "VE9SRB" <srbest@worldnet.att.net>
wrote:

> Do you always
>dismiss an other persons results and opinions simply because they disagree
>with you? The statements that you made above demonstrate a serious lack of
>professional integrity.
>
>73,
>Steve, VE9SRB
>

Hi Steve,

I heard this story on NPR this morning (it will probably repeat this
afternoon) about the LaBrea tar pits and how one animal would get
caught, attract a predator which would get caught, which would attract
a vulture which would get caught, which attracted flies which would
get caught....

You took up the challenge and got caught....

You may be surprised (perhaps not) how the replication of a fractal
design, which fully conforms or betters the original, is rejected as
flawed. This is apparently due to the extreme difficulty in realizing
a perfect(?) fractal design - or so one would be lead to believe if
such an inspecific claim of failure were to persist.

I can assure the readers that no such exactness is needed (unless you
absolutely insist on the poorer performance of the brand name model -
Chairman Bill has an operating system he would love to sell you).
Speaking of Chairman Bill, it appears that the FUD factor is alive and
well in the antenna design field (for non-computer folks FUD is an
acronym that applies to a marketing ploy of instilling Fear,
Uncertainty, and Doubt) - in other words, if the proffered design
fails some later revealed "purity" test, then it couldn't possibly
work.

My replication is deliberately non-pure, and as a consequence bested
the original (admittedly by negligible margins - much as the original
bests the comparison design... by negligible margins). The inverted
logic offered against the replication is that if the design is not
exact, then better performance is proof of failure.

This example fractal antenna, the k2, and a comparison design that is
infinitely easier to build within the same rectangular footprint was
also cavalierly dismissed as faulty. You can download both designs'

EZNEC files after viewing my data at:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
(Which the group will note is still available and unmoved in spite of protests and claims of action being taken to remove it - the FUD factor again.) You will note from this page that the near convergence of characteristics has nothing to do with the beingness of fractal. To paraphrase an old beer commercial: "It's the Ground!"

I've noted elsewhere that the limitation of a continuous wire has stymied some speculative entries. I find this an amusing commentary on the nature of the competition that tacitly admits superior performance from non-loop designs. Or could there be another reason why all comers that fit into the box are not all suitable challengers? No lumped lossy loads either. Odd that a competitor who would willingly accept the performance hit is automatically excluded from the meet. This probably discourages the use of Ground for optimization, but the rules appear to be silent in this regard - this may be a dangerous assumption for the naive entrant.

Perhaps this competition sieve is a 21st century form of the "science" of maxwellian eugenics and fractal "purity." As such it amounts to nothing more than a beauty contest (without the jiggle - DAMN!).

73's
Richard Clark, KB7QHC

1382. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:40:44 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <39B7D3ED.4F997038@earthlink.net>
Source record: 181446

We used used one for a "T" hunt tx antenna. It could be hidden in places
you would not belive!
Dave

Jake Brodsky wrote:
>
> Anyone who has been on the NG for a few years has seen the
> documentation on just how poor the DDRR is. So why does the ARRL
> continue mention of this antenna in anything resembling a positive
> light? Am I missing something?
>
> 73,
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

1383. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 17:43:46 UTC
From: sideband@mindspring.com
Message-ID: <39B7D3D2.EC817E05@mindspring.com>
Source record: 181447

snip

> >> Now imagine both of those flaws rolled into one persona, and tell me
> >> who comes to mind.
> >
>
> This has nothing to do with the thread. Would you like me to re-post Will?
>
> 73
> Chip N1IR

Cool! Then he can re-post his post, to which you will post a post saying that it has "nothing to do with the thread" and offer to re-post your post to which I will post a post saying, "Cool! Then he can re-post his post, to which you will post a post saying that it has "nothing to do with the thread" and offer to re-post your post to which I will post a post saying, "Cool! Then he can re-post his post, to which you will post a post saying that it has "nothing to do with the thread" and offer to re-post your post to which I will post a post saying, "Cool! Then he can re-post his post, to which you will post a post saying that it has "nothing to do with the thread" and offer to re-post your post to which I will post a post saying, "Cool.....

1384. Sorry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 18:06:47 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <XOQt5.1396$LS.98311@bgtnsc05-news.ops.worldnet.att.net>
Source record: 181449

The posting was supposed to be an email.

--
Mike Knowlton
Panama City Fl.

1385. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 18:41:34 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <ammfrs477uo63h1r678phv205jhoj5afgu@4ax.com>
Source record: 181451

On Thu, 17 Aug 2000 19:52:12 +0000, Jim Jerzycke <kq6ea@amsat.org> wrote:
>Amphenol rates their type-N at 1500 Volts, peak, and their type-UHF at
>500 Volts, peak.
>No mention of power handling in the catalog.
>Regards, Jim

I don't think those numbers are correct. Type N should be the same as BNC, because the connecting surfaces are the same size (IE pin and shield ring) and spacing. BNC is rated to 500 volts. 500 volts is 5 kW in a 50 ohm system (P=E^2/R).

I know that N connectors will handle 5 kW PEP, because that's the power level of the driver stage in our older TV transmitter, and it uses N connectors for the semi-rigid line which couples it to the PA. It has been working for better than 20 years with no connector failures.

OTOH, type UHF connectors have been used by amateurs as HV connectors (not a good practice, but done anyway), at voltages up to 8 kV. So a rating of only 500 volts doesn't look right for them. The type UHF has a larger spacing than the type N and BNC, so it only seems reasonable that it would have a higher voltage rating too.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1386. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 18:58:34 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <8p8ofc$v0o$1@nntp.ixcis.com>
Source record: 181452

Goldwater's dead, Arthur Godfrey's dead, King Hussein's dead
I know! Ted Nugent!
H.
WA5IGW

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:8p7t72$9gv$1@nntp9.atl.mindspring.net...
> Thread:
>
> Hey, I love the ARRL as well as the next ham, been a member for over 30
> years, but "leadership" has been sorely lacking.
>
> We need to learn from the NRA about how to be an effective special
interest
> group, we need to elect someone like Chalton Heston as the President of
the
> ARRL, maybe then "we the people" will get to keep the spectrum that we
> already own!
>
> Peter K1PO

deletia

1387. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:05:51 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7e57b.33390062@news.akorn.net>
Source record: 181453

On 7 Sep 2000 15:04:11 GMT, Boatanchor Bob NA4G
<na4g@weedcon3.cropsci.ncsu.edu> wrote:

>always need the perfect antenna, even if it were available. Under
>average conditions, +-3 or even +-10db is not a problem. If one can
>hear it, one can usually work it (pileups and contests aside --- for
>those you always will need the biggest bang for the buck horsepower).

Ten dB isn't much if you only plan on working stations that are
strong, but even 1 dB can make or break a signal under less than good
conditions.

I think part of the misconception that 5 or 10 dB is not important
comes from looking at S meters, and assuming they are 6 dB per S unit
across the scale.

It takes very little work to move a vertical from a 5 or 10%
efficiency radiator, which it will be with a single radial laid on the
ground or just above ground, to one that is 50% or higher efficiency.

It's the pursuit of perfection in squeezing the last 10% out that gets
expensive.

73 Tom

1388. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:23:24 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <tnqfrs09a0rsmdnv5ocov6jf1p7pqqe4p2@4ax.com>
Source record: 181455

On Thu, 07 Sep 2000 17:40:44 GMT, Gunner Dave <gunnerd@earthlink.net>
wrote:

>We used used one for a "T" hunt tx antenna. It could be hidden in places
>you would not belive!

Yeah, but you could do the same with a small loop and you don't even
need a ground plane.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

1389. Re: New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:24:29 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8p8q1q$7bj$1@iac5.navix.net>
Source record: 181454

If you are running 50 watts or less there is no need for concern on 2 meters. If you are running more than 50 watts I would be glad to help you with an evaluation.

73's Fred W4JLE
http://w4jle.com

> Yup, I can do a birdhouse, and I have a tall attic, but I was concerned
> about RFI in the house if the antenna is in the attic.
>
> Scott
> KD5KZN
>
>
>

1390. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:25:10 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <mpqfrs4frvn4ub3u1pt9g5eav46mh0ppu3@4ax.com>
Source record: 181456

On Tue, 05 Sep 2000 18:06:21 GMT, 2w8ji@contesting.com (Tom W8JI)
wrote:

>It fits a nitch. If someone only has a tiny bit of vertical height and
>a lot of horizontal space, it will at least radiate something.
>
>They don't say it's an efficient antenna, do they?

True, but they should at least point out what is really radiating.

In any case, I maintain that one could just as easily use a small
loop.

I think a loop is better understood than the DDRR...

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

1391. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:26:02 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7e837.34089583@news.akorn.net>
Source record: 181457

On 07 Sep 2000 17:00:12 GMT, k1bqt@aol.com (K1BQT) wrote:

>>Rick, k1bqt also posts from audrey04 (or is it 05?). Interestingly, all
>of the suspected aliases for Chip also post from one of the same two
>hosts......<
>
>Ever wonder why K1BQT hasn't appeared at Dayton or Boxboro lately? Fact is,
>"the poor old geezer slipped and fell into the freezer", as they say--and I've
>been aliasing his entire life in one short 10-minute-a-day workout for over
>three years! The controversial posts...the fights...the smart-ass
>remarks...those ham products ....the magazine articles...ALL MINE, in my spare
>time, and with with one hand tied behind my back! And you think I'm not a
>clever fellow, Mr. Rowlett?

Moh. Rikki,

I'll encrypt this message, using the Apple code.

I understand your great despair are being mentioned in the same post
as the world knowns and disrespected Barron of Bent, the Czar of Zig,
Dr. Kinko-Cohenko.

I don't think Bart meant you were Chip and NC was you and Nate is us
and we are all together. See how they run like pigs from a gun....oh
you know what I mean.

When I read his post, I understood use you as a general guideline
illustrating the basic geographical location of the spurious emissions
that radiate from Cohendoggie, Phil, Fritz99, and the gaggle of goofs
at AOL posting from the two access routes used by the multitude of
signature signing under the Fractenna name.

Don't blame poor ole Bart because you live near the newsgroup troll,
and come in through the same ladder. We know you aren't the Walrus.
You are much too tall and slim to be him.

73 Tom

1392. Re: $1000 FRACTAL ANTENNA CHALLENGE (Psychologists Show Why It is That

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:34:05 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7ec0b.35070167@news.akorn.net>
Source record: 181458

On 07 Sep 2000 11:24:31 GMT, fractenna@aol.com (Fractenna) wrote:

>This has nothing to do with the thread. Would you like me to re-post Will?
>
>73
>Chip N1IR

Yes Chip, great Master of clear writing skills.

Please re-post Will...

hey, is that a death threat you are making Chip???

1393. How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:43:54 UTC
From: Jesper Wolf Jespersen <jwj@dde.dk>
Message-ID: <eeSt5.539$p1.7580@news.get2net.dk>
Source record: 181459

I have been playing with modelling my yard antennas with eznec and I would like to se what happens to a dipole when its equiped with a feeder.
I EZNEC one can easily model a bit of transmission line to transform impedances or what ever. But the model does not radiate, and a true feeder does radiate.
Especially antennas like the G5RV where the dipole is active mostly on the low bands and the feeder starts to act as radiator on higher bands cannot be modeled this way.

In EZNEC one can model these radiating feeders as the equivalent wires of specific width, at the proper spacing and the right length. But I dont want to sit and hand calculate these things when I am using a computer for modelling. There is far to great a chance I will make an error and not get the wanted results.

So what I am asking for is a pointer to a bit of software that lets me convert from transmission line to wire models, It would be particularly nice if parameters of know feeder lines where contained in the program.

Most feeders that I have seen consist of insulated wires and EZNEC does not model those, do any of you know what to do to build relatively correct models with EZNEC for these ?

It would be nice to be able to build an antenna like the one I model in EZNEC and having it perform like the model. I am not sure I will be able to determine in the field what translations from EZNEC to the real Life were right and whicn were wrong if an antenna does not even come close to modeled results.

I am still using a demo vesion of EZNEC but am considdering to purchase the full version.

What do the rest of you think of the program ?

I think its nice, but a better user interface where one could rotate a wire around an point or stretch a wire in the graphical display would be nice. Or simply a way to change from catesian coordinates to polar for wire specificatioin would be nice for some operations.
Again my point is that we are using a computer which is much less prone of dumb errors than the user is.

Imagine for example that you want to model what it means to add some ground radial to a vertical antenna.
Its trivial and not very interesting work to sit and calculate the positions of 4, 8, 12 or 16 radials of diferent lengths. Why not let the user interface program do all this.

After all EZNEC is just a user interface and data presentation tool. The calculations are performed by NEC-2 (or NEC-4 if you are really wealthy :-).

Maybe I should get used to running a spreadsheet for all these relatively simple coordinate transformations, maybe write macros for some of it.

What do you guys use ?

Greetings and 73 from Denmark

Jesper Wolf Jespersen

OZ8ACE

1394. Re: New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:47:35 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <rhSt5.159813$c5.4180560@news2.rdc1.on.home.com>
Source record: 181460

> > How about building a 2 meter 1/4 wave ground plane antenna into a
> birdhouse
> > (build bird house around antenna) and then putting it up on a hollow
> > aluminum pole and feed the coax inside the pole. Do they allow bird
> houses?
> > Do you have and attic or dead space under the roof mount your antenna up
> > there.
> >
> > Barry D.
>
> thanks for the reply Berry!
>
> Yup, I can do a birdhouse, and I have a tall attic, but I was concerned
> about RFI in the house if the antenna is in the attic.
>
> Is a 1/4 wave ground plain a great performer? I have heard and studied
that
> with 2m and other VHF-UHF, higher is better.
>

The attic would be the best place if there is room. I know a Ham that has
all of his antenna (dualband and a HF wire) in his attic.

Yes height is might, but if you are faced with antenna restrictions you do
the best you can. The 1/4 wave antenna is sufficent for local repeaters.

Good luck,

Barry D.

1395. Re: RE: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 19:57:31 UTC
From: richardharrison@webtv.net
Message-ID: <6605-39B7F32B-67@storefull-111.iap.bryant.webtv.net>
Source record: 181464

Ed, W1RFI wrote:
"I am sure that everyone will appreciate the work you are about to do."
(on RFI problems)

Hams are a small part of RFI problems and solutions. As wireless grows at a much greater rate, hams will become even more insignificant.

Hams would be better served with creation of an attractive public image and an aggressive lobbying effort.

IEEE, SAE and all the others can manage. I`ve been amember of IEEE and its predecessors for 50 years and had a 1st phone ticket since April 1949. IEEE can manage no doubt less easily without ARRL.

Had there not been a useless code requirement, I likely would have had a ham ticket too 50 years ago too. I credit ARRL with my deprivation.

Best regards, Richard Harrison, KB5WZI

1396. Re: PL-259 SO-239 connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:00:47 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7ef90.35970768@news.akorn.net>
Source record: 181461

On Thu, 07 Sep 2000 14:41:34 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>On Thu, 17 Aug 2000 19:52:12 +0000, Jim Jerzycke <kq6ea@amsat.org> wrote:
>>Amphenol rates their type-N at 1500 Volts, peak, and their type-UHF at
>>500 Volts, peak.
>>No mention of power handling in the catalog.
>>Regards, Jim
>
>I don't think those numbers are correct.

>OTOH, type UHF connectors have been used by amateurs as HV connectors
>(not a good practice, but done anyway), at voltages up to 8 kV. So a rating of
>only 500 volts doesn't look right for them. The type UHF has a larger spacing
>than the type N and BNC, so it only seems reasonable that it would have a
>higher voltage rating too.
>
>Gary

I agree with Gary, except for the voltage issue. Most catalogs I've
seen give a peak voltage breakdown, not RMS. 500 volts peak is 354
volts RMS, and that's 2500 watts peak or average power.

Most connectors are conservatively rated, and in a comntrolled
environment with a quality connector I'm not surprized to see an N
hadle 5 kW peak if average power is low and SWR is unity.

When dealing with arcing, peak and average power ratings are the same.
We should use RMS voltage only when heat is the concern, not arcing,
unless the component also uses RMS volage for the same waveshape.
Since component manufacturers can't control waveshape, they almost
always use peak voltage in ratings.

Despite the catalog numbers quoted, UHF connector fail at
considerably more voltage than N or BNC connectors....both of which
have about the same peak voltage flashover point.

The center pins in BNC and N's are almost identical, as are spacings.

The N connector and BNC connector have two weak areas compared to a
UHF connector. The UHF connector has much higher current handling
capacity and much higher voltage breakdown. I'd never use an N
connector in a high power (more than 1000 watts average) system unless
absolutely necessary for SWR reasons. At somewhere over 100 or 200 MHz
or for exceptionally critical applications , N connectors do have an
SWR advantage.

73 Tom

1397. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:02:46 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8p8s40pgg1@news2.bit-net.com>
Source record: 181462

"Richard Clark" <rwclark@seanet.com> wrote in message
news:39b7bc94.608504@news.seanet.com...
> On Thu, 7 Sep 2000 10:34:47 -0400, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> Hi Steve,
>
> You took up the challenge and got caught....
>

Hi Richard:

Yes, I did get caught. Although I was really not surprised, I was hoping it
would not occur.

> This example fractal antenna, the k2, and a comparison design that is
> infinitely easier to build within the same rectangular footprint was
> also cavalierly dismissed as faulty. You can download both designs'
> EZNEC files after viewing my data at:
> http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
> (Which the group will note is still available and unmoved in spite of

I will enjoy taking a look.

Thanks and 73's
Steve, VE9SRB

1398. Re: antenna tv-plate- reception

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:11:40 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8p8sq9$8e3$1@iac5.navix.net>
Source record: 181463

While all things are possible, the short answer is O'Hare. (tried to spell the Greek word for no phonetically, hope that was correct)The space transmissions must first be received by a high gain antenna with a low noise preamp. Next they must be converted to a frequency that falls with in the ability of the TV set to receive them.
What satellites are you trying to receive?
--

Fred W4JLE
http://w4jle.com/

"thanos" <arthu2@iotenet.gr.NOSPAM> wrote in message
news:8p752t$n5o$1@newssrv.otenet.gr...
> sorry if this is not the right ng to post my question.
> could someone tell me if it is possible in the existing antenna tv to
> install just a
> plate for the reception of satelite chanels ? or additional equipment are
> needed?
> thank you.
> thanos
> mother tongue is greek
>
>

1399. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:24:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39b7f818.38155204@news.akorn.net>
Source record: 181465

On Thu, 07 Sep 2000 14:41:15 -0500, Arthur Unwin <aunwin@fgi.net>
wrote:

> Would you care to enlarge on your thoughts as to why
>the' least discernable difference in sound level' should
>make the extraordinary difference when trolling for DX?
>(bearing in mind your own experience of the superiority of a
>vertical over a horisontal on 160)l
>Best regards
>Art Unwin KB9MZ

A one dB change in signal to noise ratio results in a great change in the amount of data recovered. You are trying to reccover data, not detect a volume change.

A one dB change in a clear single tone with no interference is the minimum discernable change in level for the average human.

When signals are close to noise (or interference) even less than 1 dB change can be quite noticable. When there is 20 dB of headroom, who cares?

73 Tom

1400. Re: Got anybody you don't like?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:29:51 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <lRSt5.19321$wS1.1000639@nntp2.onemain.com>
Source record: 181466

This has got to be one of the lonnnnnnnnngest insults I have ever read.....

WOW! You have given me some great material to use! :-)

Thanks,

Pat

1401. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 20:37:54 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B7FCA2.1303F117@oio.net>
Source record: 181467

W1RFI wrote:
>
> >From: 'Doc w5lz@oio.net
>
> >Being just me, I was amazed at the 'run around' and
> >non-helpful 'help' I received.
>
> Doc, is there anything I can to do help? I would very much like to know what
> went wrong so I can try to fix it with you and with whatever department messed
> up, especially if it was mine!
>
> 73,
> Ed Hare, W1RFI

Ed,
Bit late for that. It dealt with RFI. I've already been to court
twice, it's been resolved. The ARRL offered a list of attorneys that
was not current, information not applicable to the situation, a few
articles from QST (not submissable in court), and left me with a very
bad taste in my mouth.
If this was the only time that I was 'let down' by the ARRL I might
consider changing my mind about the organization, unfortunately, it
was only the latest instance. Thanks, but no thanks...
'Doc

1402. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:28:44 UTC
From: k1bqt@aol.com
Message-ID: <20000907172844.27333.00000002@ng-fy1.aol.com>
Source record: 181468

Hi Tom--

Actually, the implication was supposed to be that I'm really just another alias--and a person so lazy and shiftless, it takes only 10 minutes a day for Chip to replicate my total output. Guess it didn't come off right.

Rick

1403. Re: Got anybody you don't like?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:35:51 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39B809E1.B1A2F9FD@home.com>
Source record: 181319

AMDX wrote:
>
> This was on the antenna group,
> Mike

<snip>

Wow! I didn't know Uncle Al Schwartz frequented the antenna
groups.... It sounds like him, anyway.

Mark L. Fergerson

1404. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:39:37 UTC
From: k1bqt@aol.com
Message-ID: <20000907173937.27333.00000004@ng-fy1.aol.com>
Source record: 181320

>, so even if a ham has a pretty leaky feed line, if is it 20 inches away from controlled exposure, it is okay.<

Don't know about you, but I usually connect the feedline to my radio, then I pick the microphone when I talk or hang onto the key when I send. How far away does that place me?

Rick K1BQT

1405. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:40:05 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39B80AE0.8872CB4C@home.com>
Source record: 181321

"Ed Hare, W1RFI" wrote:
>
> K1BQT <k1bqt@aol.com> wrote:
>
> > > We need a new spectrum to explore.<
>
> > We need new modes to explore.
>
> The rules permit virtually any mode to be explored on one amateur frequency
> or another. If we are not exploring, there is nothing stopping us but
> ourselves.

That, and the sure and certain knowledge that thirty seconds after
you figure out how to use it efficiently, the FCC will reallocate
(sell) Hams out of it.

Mark L. Fergerson

P.S. Don't mind me, I'm just a tad depressed lately what with this
being an election year and all.

1406. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:44:35 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <39B80C43.7640D27A@tir.com>
Source record: 181322

Dear Roy and group:

Earlier this week I was helping a colleague set up laboratory jobs to help
EE students visualize and use transmission lines. Happened to have an OLD piece of RG11 some 25 meters long. The lower frequency limit of the instrumentation is 4 MHz. It was fascinating to see how the line parameters of the old piece (lossy) of coax change with frequency. At "low" frequency the surge impedance (Z0) was about 75 ohms, which, as the frequency was raised, proceeded to spiral around the 50 ohm center of the Smith chart. Yes, surge impedance can become reactive.
Heliax is quite uninteresting. 73 Mac
P.S. My AEA CIA was better at getting actual numbers than the very expensive piece of instrumentation. This is a neat time to work with electronics and RF. Using my GR RF bridge is a pain.

--
J. Mc Laughlin n8tt@tir.com Michigan ~

1407. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:49:10 UTC
From: Jeff Goodspeed <cmsx42@email.mot.com>
Message-ID: <39B80D56.8A1FB211@email.mot.com>
Source record: 181326

I thought Iï¿½d just add a little to the confusion. The antenna I am thinking of is a compromise upon a compromise. My 70-ft. tower is at the back of my small yard. The tower is 45 ft from by back door. It is 25 ft from the back property line and 35 and 45 ft from the side property lines. I have no other supports to use as the other end support for a classical dipole antenna, (no tall trees and the xyl would not stand for a structure in the front yard). Besides, 70 ft. is only a quarter wave above the ground on 80m anyway. An inverted Vee dipole is logical, except I donï¿½t have enough space to run one of the two legs without ending up in a neighborï¿½s yard. I donï¿½t want a vertical antenna and I donï¿½t expect to have a DX cannon either.

I am contemplating a distorted inverted Vee where one leg comes down relatively close to the tower while the other end can be run out to the front yard. The included angle will be a little less than 90 deg. between the legs. I can not feed this thing with open feed line because my ham shack is on the wrong side of the house and I have to thread my coax feed lines trough and around the crawl space.

I have an article from QST from the early 90s that talks about off-center feed dipoles. They were using them on multiple bands where they worked on even numbered harmonics of the fundamental resonance length. I only want to use it on one band. The two features I liked was keeping one leg short while getting a much wider bandwidth on 80/75m than a normal dipole.

Basically, you take a half wave wire cut for 3.75 MHz. and cut it in half so one leg is one third the total length and the other is two thirds the total length. I could keep the short leg close to the tower and run the long leg out to the front yard. This would keep the current maximum higher off the ground and would be more horizontally polarized. The feed point impedance was supposed to be about 300 ohms (for a flat dipole)(4 x 75 Ohms) with a 2:1 bandwidth that covered the whole band. In the inverted Vee config, I am guessing that the impedance will drop bringing it closer to 50 Ohms.

So I needed a 4:1 balun to do all of this.

I know that high SWR does not appreciably affect the efficiency of a dipole, and I do have a home brew antenna tuner that can handle the job. I just wanted to stay away from high SWR on the feed line in case I ever run a full 1.5 KW of power. I would not want the coax break down on me.

Jeff ï¿½ KA9S

Jeff Goodspeed wrote:

> Iï¿½m procrastinating putting up a wire antenna for 80/75 meters. The
> antenna will only be used on this one band. I am considering several
> antenna types and I intend to feed it using 50-Ohm coax. Some designs

> require a 4:1 balun. For decades, I have seen a 4:1 balun described
> which used a 1/2 wave loop of coax to accomplish the impedance step up:
>
> O O
> _|_ |
> | | |
> | | |
> | | | <-- 1/2 wave
> | | |
> | | |
> | |__|
> |
> |
>
> Has anyone ever used this homebrew balun? Does it eliminate current from
> flowing down the outside of the feed line? Is the performance bandwidth
> wide enough to cover all of 80/75 m? Can 75-Ohm coax (RG-11) be used for
> the ï¿½ wave loop if the rest of the feed line is 50 Ohm (RG-213)? (Iï¿½m
> cheep and I have some RG-11 lying around)
>
> The weight and size of such a large coil of coax is not an issue for me
> as the feed point will be at my tower and not suspended in mid-air.
>
> What do you guys think?
>
> Jeff ï¿½ KA9S

1408. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:54:15 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <zaUt5.572$u95.1484768@news.ntplx.net>
Source record: 181324

Mark Fergerson <mfergerson1@home.com> wrote:

> > The rules permit virtually any mode to be explored on one amateur
frequency
> > or another. If we are not exploring, there is nothing stopping us but
> > ourselves.

> That, and the sure and certain knowledge that thirty seconds after
> you figure out how to use it efficiently, the FCC will reallocate
> (sell) Hams out of it.

What mode or operating technique that hams have figured out how to use
efficiently has been reallocated from the amateur radio service?

73,
Ed Hare, W1RFI

1409. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:55:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39B80EDA.556C@wt.net>
Source record: 181323

Mark Keith wrote:
>
> Boatanchor Bob NA4G wrote:
>
> >
> > My point in trying the enlarged 2M 2-radial ground plane was to see if
> > it would even work. It did, rather well.

Actually, I goofed there. I was comparing for ten meters, but would
still act the same for 2m if at the same height in WL. Being the 2m
version would likely be much higher in WL, I'd expect a little higher
gain numbers and a little lower angles stated. MK

>
> Note the one and two radial versions of the 5/8 2m GP with 5/8 radials
> that I posted in my comparisons of 2m verticals. The pattern skewing
> wasn't near as bad I had would have thought.
> http://web.wt.net/~nm5k/acompari.htm
> page six and seven
>
> >
> > Verticals, even simple ones, can and do work better than many folks would
> > say they do. I would consider them definitely worth trying, as opposed
> > to the usual dipole, and even in addition to the usual dipole.

I was thinking of another good example of a vertical against a dipole...
My mobile antenna on my car. Houston to FLA I tested between my dipole
at 36 ft, and my car. The car won. And both only 100w . "Used the same
radio inside". I tested this a few more times to double check, but the
car won every time. The mobile ant was my 8 ft "plastic bugcatcher". 5
ft helical stick which was an old firestick cb ant, with a appx 2 inch
dia, 10-12 inch long homemade coil in the middle. A 3 ft "stinger" whip
on top. But a case of the antenna matching the angle that I needed to
make FLA. It's just right for that distance,and evidently the dipole
wasn't that good at that needed angle. So it would win even though in
reality it's much less efficient than the dipole. What it did do was at
the angle I wanted. This was fairly late at night. MK
--
http://web.wt.net/~nm5k

1410. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 21:59:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8p9352$9sb$1@neptunium.btinternet.com>
Source record: 181325

Ian,

The most neglected subject in English engineers' education
is "Statistics". Next most neglected is "Economics".
Economy in time and material.

The whole of life, indeed the whole of existence, is
dominated by the laws of chance.

As a pedestrian you cross a busy road only because you have
subconsciously calculated a very high probability of
successfully arriving on the other side.

Baluns are needed for other engineering puposes than
prevention of TVI which, ststistically, they don't do. The
source of most TVI is the intentional high power radiation
from the main antenna and not from very weak accidental
stuff which *might* occur from other parts of the station.

The ONLY way of finding out whether a balun, by some small
chance, might be useful in keeping your TV-addicted XYL or
perhaps a neighbour happy, is not to fit one. It is clearly
uneconomical to fit one solely for that purpose and then to
test by removing it. If on its removal, as is most likely,
there is no TVI, would you put it back just because a
magazine article says it should always be there.

The engineering purpose of a balun is to transform from a
balanced to an unbalanced circuit in a transmitter
installation which conforms to licensing regulations. It is
NOT to cover up deficiencies (incompatiblities) in
television receivers which react unfavourably to frequencies
for which their owners are not licensed to receive.

The most economical way of curing TVI, in BOTH directions of
transmission, is to put a small choke in the TV mains power
lead or in the TV antenna down-lead immediately at the
receiver. Which most amateurs will take pleasure in making
and fitting for a neighbour entirely free of charge.

Reg, G4FGQ

1411. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:09:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8p93kv$qr2$1@uranium.btinternet.com>
Source record: 181327

Peter wrote -
> we need to elect someone like Chalton Heston as the
President of the
> ARRL, maybe then "we the people" will get to keep the
spectrum that we
> already own!
========================

HAMS ! ARM YOURSELVES !

TO THE BARRICADES !

1412. Re: RE: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:10:26 UTC
From: mike.luther@ziplog.com
Message-ID: <srg4ii8iljn20@corp.supernews.com>
Source record: 181328

In <6605-39B7F32B-67@storefull-111.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:
>Ed, W1RFI wrote:

>Hams are a small part of RFI problems and solutions. As wireless grows
>at a much greater rate, hams will become even more insignificant.

>Hams would be better served with creation of an attractive public image
>and an aggressive lobbying effort.

>Best regards, Richard Harrison, KB5WZI

My only encounter with this personally as a ham so far was interesting...
A friend asked me, "Mike aren't you worried about all this radio stuff
with all your high powered ham station and what they say about cell
phones?"

I said, "Well no, a simple explanation of this in how long the
antenna wire is! Mine are huge! You know 60 to 70 feet long!
The calculated the safe distance even with high power says I
can stand right near it safely!"

My friend's eyes widened a bit as I continued, Now as the antenna
gets shorter, things get worse. See that TV antenna, it's a *LOT*
shorter and smaller than my stuff you've seen! Getting next to a
TV transmitter may be a different story!"

I'd seen he was equipped!, Say! You have a cell phone on your belt!
Take it off and look at the length of the antenna! That's getting
short down toward the same short lengths you have in a microwave
oven, you know!"

Definite pause here in the conversation ...

My friend took up his phone, noticed the antenna was a little tiny thing!

He said, "Gee, but ny cell phone antenna is a little short
stubby thing. Does that mean it's worse than all your stuff
you are using?"

I grinned, "Could be! Remember you're holding it up next to your
ear all the time its in use! Course it's low power and we really
don't know! (Paused a moment) But maybe you're closer to the bad
stuff all the time than I am; you reckon?"

Friend has this puzzled look. He looks at me, then his cell phone, than
back at me. Now he's seen me with an HT, so he says, "But you use
something like a cell phone too!" His eyes are now all bright and beady

like!

I said, "Well yes, but as much as I use it, I also have a
hand mic on a cord so I don't hold it up to my head ....
just between us two pious and holy communicators here!"

Friend is now thinking realistically, maybe. At any rate he's not thinking the wrong things about ham radio! Score one for ham radio, no lies told, nothing wrong said. It's partly in how you say things that can help us all here.

There happens to be a very interesting article in the just arrived trade rag "CONFORMITY" for August 2000! Read the article "Medicinal EMF's" by Janet Raloff for a *VERY* interesting discussion of the medical effects on bone mass increase due to vibration!

It's put forth in the article that one reason that bone mass and strength increase as a result of vibration, is the bones are generating tiny EMF forces from piezo-electric effects that the shock of using them creates! Thus, it's being speculated that the proper use off EMF energy, in the right coupling mode to bones, EMF fields actually INCREASE their strength and decreases the effects of osteoporosis!

///
>O|O<
~

Now ... since reading that article, strictly in humor here .. if we all go around all this RF, is one reason we are so stubborn as hams, because our skulls have been hardened by all the bashing we take?

GDRFC ... again!

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

1413. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:17:43 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <zwUt5.574$u95.1485787@news.ntplx.net>
Source record: 181329

'Doc <w5lz@oio.net> wrote:

> > Doc, is there anything I can to do help? I would very much like to know what
> > went wrong so I can try to fix it with you and with whatever department messed
> > up, especially if it was mine!

> Bit late for that. It dealt with RFI. I've already been to court
> twice, it's been resolved. The ARRL offered a list of attorneys that
> was not current, information not applicable to the situation, a few
> articles from QST (not submissable in court), and left me with a very
> bad taste in my mouth.

I am sorry to hear that. If the RFI problem involved the legal end of things, then that would have ended up with our Regulatory Information Branch. Once it becomes a legal matter, the League is rather limited in what it can do to help because the HQ staff is not qualified or licensed to give legal advice. The general help that can be given is to refer hams to those attorneys who have indicated to ARRL that they have some knowledge of ham radio and things RF and to offer some general information. Unfortunately, as attorneys move or leave practice, the League does not always know about the change, so the list can become a bit dated. I do appreciate any information about problems in the list that you forwarded when you discovered them; that information would have helped the next guy who had an RFI problem.

Over the past couple of months, a few things have changed. First, the Board just passed a motion that says in those cases where the Board believes that the case has strong national implications, the League can fund some of the legal expenses. I don't know how this will work out in practice.

The ARRL Web info on RFI and the law was updated quite a bit recently. See:

http://www.arrl.org/field/regulations/rfi-legal/

On that page, perhaps the most powerful information was written by an attorney and published in one of the collegiate legal journals. The link will get you to http://www.sbot.org/docs/RFI.pdf . Other good information are reprints of the various letters the FCC has written in support of federal pre-emption of RFI. I am certain that these would have been in the information that ARRL had sent to you (if not, the goof was bigger than I thought).

From the informational end, the FCC's information on RFI was rewritten a few years ago to be much more supportive of ham radio. (Tom Hora of the FCC led the team that did the rewrite; I forwarded to them nearly everything I had

ever written on RFI and told them they could use it shamelessly. The end result is pretty useful, thanks to the hard work of the FCC team.) The FCC info can be downloaded from:

http://www.fcc.gov/cib/Public_Notices/heee1.html

The ARRL TIS pages have a number of RFI pages, too. See http://www.arrl.org/tis/info/rfigen.html and follow the links. This information is continued in the ARRL RFI Book http://www.arrl.org/catalog/6834 .

Among the most important pages is the info for the neighbors of hams, published jointly by the ARRL and the Consumer Electronics Association. See http://204.245.190.45/tech_ed_and_training/resources/67-12005.cfm.

Would you mind sharing, either privately or on the appropriate NG, what your problem was, how it got resolved, what changes you think ARRL should make to its materials and what the League could have offered you that would have been helpful? Many of these cases are really not about RFI, or even RF safety, but are really related to the tower that your neighbors may not have liked. I can carry your feed back to the Regulatory folks and see what changes can be made to help others who may have the same problem. There have been a few changes made over the years, but there is always room for more improvement. (This is open to anyone; if you have any ideas on how the ARRL's material can be improved, send 'em on. If you have comments or input on ARRL policy, make your views known to your ARRL Director, see http://www.arrl.org/divisions for names, addresses, phone numbers, email addresses and URLs.)

73,
Ed Hare, W1RFI
ARRL Lab

1414. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:24:11 UTC
From: fractenna@aol.com
Message-ID: <20000907182411.26462.00000019@ng-da1.aol.com>
Source record: 181330

>Actually, the implication was supposed to be that I'm really just another
>alias--and a person so lazy and shiftless, it takes only 10 minutes a day for
>Chip to replicate my total output. Guess it didn't come off right.
>
>Rick
>

At last count, I supposedly have, oh--what is it--23 aliases? Or is it 39? I
really wish I had that much free time to be that creative (but if I did I'd
take up painting again).

Rick and I have been through some major divisions but I hardly feel either
doubts the existence of the other...am I right Rick?

73
Chip N1IR

1415. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:27:45 UTC
From: fractenna@aol.com
Message-ID: <20000907182745.20305.00000079@ng-da1.aol.com>
Source record: 181331

>
>W1RFI wrote:
>>
>> >From: 'Doc w5lz@oio.net
>>
>> >Being just me, I was amazed at the 'run around' and
>> >non-helpful 'help' I received.
>>
>> Doc, is there anything I can to do help? I would very much like to know
>what
>> went wrong so I can try to fix it with you and with whatever department
>messed
>> up, especially if it was mine!
>>
>> 73,
>> Ed Hare, W1RFI
>
>Ed,
> Bit late for that. It dealt with RFI. I've already been to court
>twice, it's been resolved. The ARRL offered a list of attorneys that
>was not current, information not applicable to the situation, a few
>articles from QST (not submissable in court), and left me with a very
>bad taste in my mouth.
> If this was the only time that I was 'let down' by the ARRL I might
>consider changing my mind about the organization, unfortunately, it
>was only the latest instance. Thanks, but no thanks...
> 'Doc
>

So, you feel that because you messed up, that its ok to strike out at others
you perceive as targets...that about the gist of it 'Doc'?

73
Chip N1IR

1416. STUFF FOR SELL

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:36:55 UTC
From: ts950sdx@aol.com
Message-ID: <20000907183655.24080.00000099@ng-fh1.aol.com>
Source record: 181332

70FT ROHN 25G TOWER
HEAVY DUTY HINGE PLATE
T-6 TENNADYNE LOG ANTENNA 13 THUR 30 MHZ
YAESU G 1000SDX ROTATOR
150 FT OF ROTATOR CONTROL CABLE
150 FT RG 8 COAX
HEATHKIT 2060A TUINER

PACKAGE DEAL $1200 PICK UP ONLY
OR TRADE ON A LATE KENWOOD 870
WITH CASH
MAY MEET SOMEONE WITHIN A HOURS DRIVE
OF NASHVILLE TN
JOE KF4TOH

1417. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:48:22 UTC
From: k1bqt@aol.com
Message-ID: <20000907184822.20808.00000103@ng-fc1.aol.com>
Source record: 181333

>Rick and I have been through some major divisions but I hardly feel either doubts the existence of the other...am I right Rick?<

I think I'm all here, yes.

Rick K1BQT

1418. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 22:51:28 UTC
From: k1bqt@aol.com
Message-ID: <20000907185128.20808.00000104@ng-fc1.aol.com>
Source record: 181334

Good point. When I go to the "little room", I know I'm holding a leaky line.
When I pick up my mic, I'm not so sure.

Rick K1BQT

1419. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:01:12 UTC
From: richardharrison@webtv.net
Message-ID: <7982-39B81E38-19@storefull-112.iap.bryant.webtv.net>
Source record: 181335

Ed Hare, W1RFI wrote:
"What mode or operating technique that hams have figured out how to use efficiently has been reallocated from the amateur radio service?"

Haven`t hams surrendered spectrum lately?

The respondents may have been recalling:
"The rules permit virtually any mode to be explored on one frequency or another." and "That , and the sure and certain knowledge that thirty seconds after you figure out how to use it efficiently, the FCC will reallocate (sell) Hams out of it.". The respondents were likely recalling a time which really predated the FCC too. That is, the time of the order restricting amateurs to "200 Meters and Down".

Best regards, Richard Harrison, KB5WZI

1420. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:19:26 UTC
From: k3bu@aol.com
Message-ID: <20000907191926.09626.00000083@ng-cp1.aol.com>
Source record: 181336

>
>But if you don't "pass," you can use other methods, such as antenna modeling,
>to do your own estimate. This is the approach that ARRL used in generating
>some 80 pages of tables of real antennas modeled above ground for the RF
>Exposure and You book. From all of the models I have done, I cannot see how
>that antenna at 130 feet could have RF on the ground that exceeds the limits
>and if it were my station, my evaluation would be based solely on that
>general
>knowledge. If you think you may have questions from neighbors, though, you
>may
>want to do a more thorough evaluation. How many elements and at what
>spacing?
>Vertically or horizontally stacked? How much power and what modes?
>
>73,
>Ed Hare, W1RFI
>

What polarization? How does it reflect from the metal roof and house wiring?
Are the elements aluminum or copper? Sunspot cycle? What about worms next to
radials? yadayadayada

Now we get into arguments how to calculate, how to measure and looks like very
soon the solution is going to be - have a RF Gestapo running around with FS
meters or installing chart recorders at each station, and knock on your door
after midnight during the contest, ...
Never mind the "standard" is useless, based on nothing, but its the "law" so
obey by it or you will be taken to Siberia (where you will meet Freak - the
commandante of RF reeducation camp).
Stay away from RF, eat sugar and vegetarian crap and we will see you in SK
"honor" roll soon.

Yuri
the RF redneck

1421. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:21:03 UTC
From: richardharrison@webtv.net
Message-ID: <7981-39B822DF-48@storefull-112.iap.bryant.webtv.net>
Source record: 181343

Rick, K1BQT wrote:
"When I go to the "little room", I know I`m holding a leaky line."

Just so, but surely you`re competent and avoid being leaked upon.

Best regards, Richard Harrison, KB5WZI

1422. BS PhD FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:23:22 UTC
From: "A. Melon" <juicy@melontraffickers.com>
Message-ID: <b8699516b4bb5bc038b4618de40aa128@melontraffickers.com>
Source record: 181337

You Amerikanski Idiots still not know what is truth.
Idiot PhD Chip N1IR STEAL idea for Fractal Antenna from great Russian Inventor Basil Vladimirovich Beserov who invented Fractal Antenna in 1936 and operated many stations in Siberia using this system.
Itiot PhD Chip N1IR is just plain stealer of others idea and when any one asked him to explain he not know he just call all you STUPID and he get away with it.
Why do you think he not EXPLAIN before how can theif explain how he made the gold.

Boris

1423. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:29:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8238d.49282012@news.akorn.net>
Source record: 181338

On Thu, 07 Sep 2000 16:19:39 -0500, Arthur Unwin <aunwin@fgi.net>
wrote:

>Or would it be better to compare coverage or footprint for a one degree
>difference in take off, say 12 degree versus 13 degree.
>With respect to intelligence culled from a radiated signal it would
>appear
>then that the db measurement is totally inapropiate in this sense
>especially

The TO angle is one of the most wasteful things included in any
modeling program. It causes more problems than it cures.

IMO, it is like "mismatch loss" on an antenna analyzer.

The only thing that matters for transmitting, in the general amateur
radio case where multipath isn't an issue, is the absolute gain at the
desired angle.

Forcing the TO angle lower for a given antenna height often reduces
the actual power at the distant location.

It is as foolish as looking for a deep single point null at the
expense of a broader but somewhat more shallow null.

73 Tom

1424. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:34:26 UTC
From: 2w8ji@contesting.com
Message-ID: <39b82501.49654053@news.akorn.net>
Source record: 181339

On 07 Sep 2000 22:51:28 GMT, k1bqt@aol.com (K1BQT) wrote:

>Good point. When I go to the "little room", I know I'm holding a leaky line.
>When I pick up my mic, I'm not so sure.
>
>Rick K1BQT

Do the taste test Rick.

Place you tounge on the antenna, and transmit.

Now place you tounge on the microphone and see how it feels.

Better yet, do it the other way. The way I suggested above won't work,
becuase you woiuln't have a tounge left.

Now, if you want to carry this test in the next room....I guess it's
your choice. You might have your phil of things in that case.

73 Tom

1425. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:40:08 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8260f.49923922@news.akorn.net>
Source record: 181341

On Thu, 7 Sep 2000 17:54:15 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>What mode or operating technique that hams have figured out how to use
>efficiently has been reallocated from the amateur radio service?
>
>73,
>Ed Hare, W1RFI

Spark Ed! The FCC has ripped us of by not allowing us to use spark,
and it's all your fault!

Seriously, I'd like to see the ARRL ask for a narrow mode segment on
160 meters. One for RTTY, PSK, CW, and other narrow modes...just like
all the other bands have. If the ARRL did that, I'd support them like
they were the best thing since sliced butter!

Why does the ARRL think 160 is any different than the other bands from
80 through 2 meters?

73 Tom

1426. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:43:26 UTC
From: 2w8ji@contesting.com
Message-ID: <39b827b1.50341863@news.akorn.net>
Source record: 181342

On 07 Sep 2000 22:27:45 GMT, fractenna@aol.com (Fractenna) wrote:

>So, you feel that because you messed up, that its ok to strike out at others
>you perceive as targets...that about the gist of it 'Doc'?
>
>73
>Chip N1IR

But Chip (or NC, whatever the case is), you do that all the time!!!!

Why do you expect Doc to be any different than you? In the very next
post, you go after doc!

73 Tom

1427. Re: EZNEC File for J Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:46:44 UTC
From: 2w8ji@contesting.com
Message-ID: <39b82842.50487362@news.akorn.net>
Source record: 181344

On 07 Sep 2000 22:48:22 GMT, k1bqt@aol.com (K1BQT) wrote:

>>Rick and I have been through some major divisions but I hardly feel either
>doubts the existence of the other...am I right Rick?<
>
>I think I'm all here, yes.
>
>Rick K1BQT

...and we all think there is only one of you, Rick, posting under one
name.

Can't say the same for those other AOL guys from your area.

1428. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:48:56 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39B82968.3222C50B@fgi.net>
Source record: 181340

Gotcha
Thanks
Art Unwin KB9MZ

Tom W8JI wrote:

> On Thu, 07 Sep 2000 16:19:39 -0500, Arthur Unwin <aunwin@fgi.net>
> wrote:
>
> >Or would it be better to compare coverage or footprint for a one degree
> >difference in take off, say 12 degree versus 13 degree.
> >With respect to intelligence culled from a radiated signal it would
> >appear
> >then that the db measurement is totally inapropiate in this sense
> >especially
>
> The TO angle is one of the most wasteful things included in any
> modeling program. It causes more problems than it cures.
>
> IMO, it is like "mismatch loss" on an antenna analyzer.
>
> The only thing that matters for transmitting, in the general amateur
> radio case where multipath isn't an issue, is the absolute gain at the
> desired angle.
>
> Forcing the TO angle lower for a given antenna height often reduces
> the actual power at the distant location.
>
> It is as foolish as looking for a deep single point null at the
> expense of a broader but somewhat more shallow null.
>
> 73 Tom

1429. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:50:02 UTC
From: 2w8ji@contesting.com
Message-ID: <39b82908.50685492@news.akorn.net>
Source record: 181345

On Thu, 7 Sep 2000 22:59:58 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>The most economical way of curing TVI, in BOTH directions of
>transmission, is to put a small choke in the TV mains power
>lead or in the TV antenna down-lead immediately at the
>receiver. Which most amateurs will take pleasure in making
>and fitting for a neighbour entirely free of charge.
>----
>Reg, G4FGQ

A choke is the best things for power lines, but not antenna leads.

A series capacitor works better in antenna leads at the TV.

Actually the single most effective cure for TVI is shunting the common
mode current around the TV, rather than try to stop it. That works the
vast majorty of the time, and costs a few pennies.

73 Tom

1430. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:52:02 UTC
From: 2w8ji@contesting.com
Message-ID: <39b829ce.50883587@news.akorn.net>
Source record: 181346

On Thu, 07 Sep 2000 17:44:35 -0400, "J. Mc Laughlin" <n8tt@tir.com>
wrote:

>parameters of the old piece (lossy) of coax change with frequency. At
>"low" frequency the surge impedance (Z0) was about 75 ohms, which, as
>the frequency was raised, proceeded to spiral around the 50 ohm center
>of the Smith chart. Yes, surge impedance can become reactive.

You must have had defective cable, or it was misterminated. That is
not normal behavior, even for the cheapest cables.

73 Tom

1431. 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-07 23:54:47 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39B82AC7.74B62794@attglobal.net>
Source record: 181347

OK Folks... here it goes. I have a 96 Suburban that I want to mount an antenna for 10 meters (without drilling holes in my vehicle). I currently made a mount from steel that comes out from under the rear bumper/drivers side (so doors will open). This antenna was a ham fest acquisition and the notation said it was very broad banded for 10 & 11 meters. it's shiny, has two big coils (like springs, not wound coils) and is about 5 feet tall or so and aparently isn't worth a hoot!. I have no directions. When mounted it sticks up past the roof about 1.5 maybe 2 feet. I took my TS440SAT out and placed it on the fron seat (coax is in the vehicle, not running outside).
SWR's were through the roof. The vehicle was sitting beside the house in the driveway.

I have a hunch this is a glorified CB antenna. The AT would tune it but not above 29 MHZ. I'd kinda like to have an antenna that will tune to a reasonable SWR so I can use my little IC706 (no tuner) .

Well everyone, did I give you enough info to point me in the right direction, do I start cutting wire off the antenna (whip is adjustable), or do I shit-can it and find a ham stick.
It is adjustable to about 4 inches before it bottoms out.

Inclusion.... here's a thought, does anyone think that by removing one of the sets of "springs" this would place it in the 10 meter band????
I'm assuming a 10 meter antenna will be shorter than an 11 meter antenna...no?

Back to original post....

I'm just not sure which way to go or what is the culprit.

I'd really like to stay with a bumber mount of some kind and not have some huge mast on top of the roof, etc.

TNX
Wayne
N3TNS

1432. Re: BS PhD FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 00:27:51 UTC
From: fractenna@aol.com
Message-ID: <20000907202751.20150.00000108@ng-da1.aol.com>
Source record: 181348

>
>You Amerikanski Idiots still not know what is truth.
>Idiot PhD Chip N1IR STEAL idea for Fractal Antenna from great Russian
>Inventor Basil Vladimirovich Beserov who invented Fractal Antenna in 1936 and
>operated many stations in Siberia using this system.
>Itiot PhD Chip N1IR is just plain stealer of others idea and when any one
>asked him to explain he not know he just call all you STUPID and he get away
>with it.
>Why do you think he not EXPLAIN before how can theif explain how he made the
>gold.
>
>Boris

No;

Inspiration from mooze and skayrul.

73
Chip N1IR

1433. Boris with the Bulging Eyes...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 00:49:04 UTC
From: fractenna@aol.com
Message-ID: <20000907204904.20156.00000135@ng-da1.aol.com>
Source record: 181349

Well, so far tonight I see that I, allegedly:

1) have no respect from "professionals";
2) stole fractal antennas from some Siberian mad scientist-- which sounds a lot like 'Badenov'.

I suppose this makes me a cross between Rodney Dangerfield and 'Mr. Know it All'.

Sorry 'Sherman'!

There are a lot of angry people around. Don't they know about prozac?

73
Chip N1IR

1434. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 00:51:28 UTC
From: scott_evans50@hotmail.com
Message-ID: <8p9d69$2ni$1@nnrp1.deja.com>
Source record: 181350

Forget it, it's CB'er eye candy. The two springs are loading coils to tune it for use in the 11 meter band. As for being able to operate both 11 and 10 meters with a 5 foot antenna.. forget that also! The very best antenna for 10 meters is a simple stanless steel 108 inch whip from Radio Shack. Without the heavy spring it's just right to use on 10 meters. With the spring it's just right for 11 meters. You really don't need the spring with the antenna and an antenna tuner will match it for use on both bands. This is a simple 1/4 wave antenna and so no loading inductors are required and the match will be very close to 50 ohms also.

Sent via Deja.com http://www.deja.com/
Before you buy.

1435. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 01:38:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8p9ge2bbh1@plutonium.btinternet.com>
Source record: 181352

To model, for example, a dipole fed with coaxial line and no balun, just connect one side of the dipole center down to ground via a conductor of same length and diameter as the coaxial outer. Connect the generator to the dipole center.

The antenna doesn't know or care where the generator is situated. It receives its energy at the usual place and radiates it with a little assistance from the outer conductor of the coax. The computed radiation pattern will be correct.

But if you are interested in the input impedance of the coax it will have to be measured or calculated separately. Use one of my programs. DIPOLE1 does the obvious. RJELINE3 calculates the general case of input impedance of any impedance line for any terminating impedance. Program ZL_Zin does the reverse and calculates what the terminating impedance must be for a known input impedance (measured with your antenna analyser ?).

Reg, G4FGQ
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Jesper Wolf Jespersen <jwj@dde.dk> wrote in message
news:eeSt5.539$p1.7580@news.get2net.dk...
>
> I have been playing with modelling my yard antennas with
eznec and I would
> like to se what happens to a dipole when its equiped with
a feeder.
> I EZNEC one can easily model a bit of transmission line to
transform
> impedances or what ever. But the model does not radiate,
and a true feeder
> does radiate.
> Especially antennas like the G5RV where the dipole is
active mostly on the
> low bands and the feeder starts to act as radiator on
higher bands cannot be
> modeled this way.
>

> In EZNEC one can model these radiating feeders as the
equivalent wires of
> specific width, at the proper spacing and the right
length. But I dont want
> to sit and hand calculate these things when I am using a
computer for
> modelling. There is far to great a chance I will make an
error and not get
> the wanted results.
>
> So what I am asking for is a pointer to a bit of software
that lets me
> convert from transmission line to wire models, It would be
particularly nice
> if parameters of know feeder lines where contained in the
program.
>
> Most feeders that I have seen consist of insulated wires
and EZNEC does not
> model those, do any of you know what to do to build
relatively correct
> models with EZNEC for these ?
>
> It would be nice to be able to build an antenna like the
one I model in
> EZNEC and having it perform like the model. I am not sure
I will be able to
> determine in the field what translations from EZNEC to the
real Life were
> right and whicn were wrong if an antenna does not even
come close to modeled
> results.
>
> I am still using a demo vesion of EZNEC but am
considdering to purchase the
> full version.
>
> What do the rest of you think of the program ?
>
> I think its nice, but a better user interface where one
could rotate a wire
> around an point or stretch a wire in the graphical display
would be nice. Or
> simply a way to change from catesian coordinates to polar
for wire
> specificatioin would be nice for some operations.
> Again my point is that we are using a computer which is
much less prone of
> dumb errors than the user is.
>

> Imagine for example that you want to model what it means
to add some ground
> radial to a vertical antenna.
> Its trivial and not very interesting work to sit and
calculate the positions
> of 4, 8, 12 or 16 radials of diferent lengths. Why not let
the user
> interface program do all this.
>
> After all EZNEC is just a user interface and data
presentation tool. The
> calculations are performed by NEC-2 (or NEC-4 if you are
really wealthy :-).
>
>
> Maybe I should get used to running a spreadsheet for all
these relatively
> simple coordinate transformations, maybe write macros for
some of it.
>
> What do you guys use ?
>
> Greetings and 73 from Denmark
>
>
> Jesper Wolf Jespersen
>
> OZ8ACE
>

1436. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 01:51:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B84627.57D9B84C@eznec.com>
Source record: 181351

I'm not convinced Tom's soil is poor from a conductivity point of view. Hm, an idea. In your spare time, Tom, if you have the measurement equipment, you might run a radial measurement or two and determine the apparent conductivity like the broadcasters do. 160 is close enough to the AM BC band so the measurements should be reasonably valid.

Wonder how high the water table is where you live, Tom? At 1.8 MHz, the skin depth is 7 feet in very good soil, and nearly 20 feet in average soil. In poor soil it's 37 feet, so what's down deep gets more and more important as the soil gets poorer and poorer.

Maybe the disparity between Ed's models and Tom's observations is evidence that the arrival angle is lower, perhaps much lower, than the fairly high angle quoted by Ed. Does anyone know of any decent study or studies that actually determined "typical" arrival angles for really long-haul DX on or near 160 meters?

Ed, at what elevation angle are the vertical and dipole about equal, say over very good ground?

Roy Lewallen, W7EL

"Ed Hare, W1RFI" wrote:
>
> Tom W8JI <2w8ji@contesting.com> wrote:
>
> > I live in Georgia, an area noted for poor soil. I have a 200 foot
> > tower with 100 200 foot (or so) radials.
>
> > I have a 318 foot tower, with a dipole (droopy dipole, ends are about
> > 250 feet or so high).
>
> > In hundereds of A-B tests on 160 meters, the dipole and vertical are
> > either the same...or the vertical is a bit better. That's broadside to
> > the dipole, of course off the ends the vertical is substantially
> > better.
>
> On 160 M, I am not at all surprised, but you are bringing up a very good
> point -- the lower angle radiation pattern of an antenna is much less
> important on the lower bands than it is on the higher bands. If memory
> serves (any prop wizards, chime right in), most of the 160 M signals arrive
> at about 20-40 degrees, even for the real long haul stuff.
>
> So, I ran a quick model of a 200 foot vertical with 100 200-foot radials
> over poor ground. It showed 0.3 dBi at 23 degrees. (Your mileage may vary;
> I wasn't incredibly careful with the design.)

>
> What is unexpected is seeing the vertical outperform the dipole. EZNEC
> estimates a half-wave dipole at 318 feet at 8.25 dBi gain at 23 degrees. It
> has a relatively deep null at about 53 degrees, but that would apply mostly
> to relatively close US stations.
>
> Putting the vertical over very good ground, the model predicts that the gain
> is about 2.4 dBi at 16 degrees, and actually -0.3 dBi at 23 degrees, but no
> matter how I slice it, except at angles above 45 degrees or so, that dipole
> is a lot better, according to the models. Maybe some of the other modeling
> folks can chime in.
>
> > I had similar results on 80, with a dipole just under 1/2 wl high,
> > except the dipole was generally better within a thousand miles on 80.
> > Outside that, they were about even.
>
> I don't have time to run the models, but I understand that a bit better.
>
> > The worse investment I ever made in improving my signal was the 300
> > foot tower, but it turned out to be the most educational!
>
> > N6RK has done extensive comparisons on other bands. The data is on his
> > web page.
>
> > Never underestimate what a vertical a good system can do on the lower
> > bands!
>
> I won't, Tom, and I don't even have to understand it, or see the models
> agree with you or with me, to believe it. :-
>
> 73,
> Ed Hare, W1RFI

1437. Log Periodic antenna design program?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 02:28:51 UTC
From: Jim Berry K7SLI <basalop@gte.net>
Message-ID: <D9Yt5.2004$yl.315420@paloalto-snr1.gtei.net>
Source record: 181353

Hello Group,

Once upon a time, many moons ago, I used to have a really neat Log
Periodic antenna design program. The program was in Basic, and the
computer was an old XT. The old XT is long gone, along with the program,
I had a ball with that program and could design all kinds of
the things. Both the sloping wire, and the beam type.

Is there a version that will work with my latest confuser (computer),
with Windows 98?

73 Jim K7SLI

1438. Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 02:30:58 UTC
From: Bill <bill@hovac.com>
Message-ID: <8p9iuh$1sv9$1@box6.cho.cstone.net>
Source record: 181354

Hi All,
I have a telephone pole that is approximately 45ft high. I am planning on putting up a 10-15-20 tribander with a 18ft boom and a rotor.

Has anyone seen an antenna and rotor like this mounted on top of a couple of lengths of conduit on the ground and pulled up next to the pole with a rope or cable ? Seems to me it could be done, but would like some feedback from anyone who may have tried to help find glitches in it before I try it (or not).

Thanks,
Bill

1439. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:08:15 UTC
From: 2w8ji@contesting.com
Message-ID: <39b84f72.60521010@news.akorn.net>
Source record: 181355

On Thu, 07 Sep 2000 18:51:35 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm not convinced Tom's soil is poor from a conductivity point of view.
>Hm, an idea. In your spare time, Tom, if you have the measurement
>equipment, you might run a radial measurement or two and determine the
>apparent conductivity like the broadcasters do. 160 is close enough to
>the AM BC band so the measurements should be reasonably valid.

Spare time, OK!

Actually I looked at the proof for WBAF on 1090. They did a radial
that crosses mu place. It looks like most areas around here at about 4
to 5 mS/m or so on 1090.

>Wonder how high the water table is where you live, Tom? At 1.8 MHz, the
>skin depth is 7 feet in very good soil, and nearly 20 feet in average
>soil. In poor soil it's 37 feet, so what's down deep gets more and more
>important as the soil gets poorer and poorer.

It used to be high. My well is 30 feet deep, and I three springs on my
farm. They have gone dry, and the soil is bone dry now to ten feet or
so becuase of the drought. I still notice no difference.

>Maybe the disparity between Ed's models and Tom's observations is
>evidence that the arrival angle is lower, perhaps much lower, than the
>fairly high angle quoted by Ed. Does anyone know of any decent study or
>studies that actually determined "typical" arrival angles for really
>long-haul DX on or near 160 meters?

I can say this. My verticals work best for transmitting and receiving.

If I drop my dipoles, and feed the 318 foot tower as a vertical, it
remains good at night out at 500 miles or so. The 200 foot tower is
better closer in, and equal out far.

The 300 ft tower has a definite advantage during the daytime, working
long distances, over other omni antennas. The high dipole stinks
during the daytime. At night, there are times the dipole and 200 ft
vertical are even...but most of the time the vertical is best. The
vertical is never worse, not even inside Georgia.

I found this educational, but I wish the education came before I
installed the high tower. I really though a dipole antenna at 300 feet
or so, or a pair of dipoles phased, would be a killer antenna.

Now I'm educated.

So please someone, tell me what to do. I'd like to use that tall tower on 160, instead as a roost for Buzzards.

By the way, I hope with some help to be able to work out how to measure wave angle. I'm doing digital recordings of DX stations using a pair of phase locked receivers on two directional arrays antennas spaced about one wavelength apart.

73 Tom

1440. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:09:43 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B8586E.DFE98F4B@mindspring.com>
Source record: 181356

Indeed! You have a future in politics, especially politics of the local, "law-and-order" {sic} variety. Ever know anyone, any community/city/county, to get excited and busy because the streets are safe and clean, the schools are graduating merit scholars, and property values are rising?

I have the QST CD-ROMs, and it is my opinion, having read articles, letters and editorials reaching back to the 20's, that have are no different than everyone else--we have been predicting our own demise, or else that ham radio is going to lose everything worthwhile about it, due to government/business taking our bands, new operators, new modes, new equipment, licensing changes, rules changes, equipment prices, and other technology since we got back on the air a few years after WWI.

It is really remarkable how little has changed since then--the tone, the arguments, the evidence, it's all virtually the same today as it was when H.P. Maxim was still ARRL President. I guess that we just aren't happy unless we can view ourselves as being under siege. Ever read or see Vonnegut's "Harrison Bergeron"? Like that, at the end.

de Will KD7BFX

K1BQT wrote:
>
> Hi Tom--
>
> Then again, perhaps I'm smelling opportunity and money. There is, after, a lot
> more cash to be made by promoting hysteria than by promoting the facts. If you
> don't believe me, just ask the news director at your local television station!
>
> Rick K1BQT

1441. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:11:36 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <8p9l7j$n0c@nnrp1.farm.idt.net>
Source record: 181357

"Bill" <bill@hovac.com> wrote in message
news:8p9iuh$1sv9$1@box6.cho.cstone.net...
> Hi All,
> I have a telephone pole that is approximately 45ft high

Is this YOUR utility pole? If it is, but it is still in the utility
company's right of way it would not be legal for you to use it IMHO.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

1442. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:29:30 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <U4Zt5.584$u95.1502099@news.ntplx.net>
Source record: 181358

Roy Lewallen <w7el@eznec.com> wrote:

> I'm not convinced Tom's soil is poor from a conductivity point of view.
> Hm, an idea. In your spare time, Tom, if you have the measurement
> equipment, you might run a radial measurement or two and determine the
> apparent conductivity like the broadcasters do. 160 is close enough to
> the AM BC band so the measurements should be reasonably valid.

I wasn't convinced either, but when I ran the model over very good ground, all I saw was an improvement in the lowest angle performance, and a very slight decrease at the higher angles, just what I would have expected, with a slight increase in maximum gain at the lower angles.

> Maybe the disparity between Ed's models and Tom's observations is
> evidence that the arrival angle is lower, perhaps much lower, than the
> fairly high angle quoted by Ed. Does anyone know of any decent study or
> studies that actually determined "typical" arrival angles for really
> long-haul DX on or near 160 meters?

Tom's results indicated that the vertical was better for even moderately close signals, if I recall what he said. If the vertical was over very good ground, I would expect to see that improvement only for signals arriving below 20 degrees.

I know of no studies, although I recall seeing a table published somewhere. To obtain such info, I usually use the absolutely incredible "IONCAP/WINDOWS" based program available as freeware at:

http://elbert.its.bldrdoc.gov/pc_hf/hfwin32.html

It is, btw, a 5 Mb file, so the download can be pretty slow. This version does NOT run on Windows 3.x; there are 16-bit verisons on the site. (/hfwin16.html?)

I just ran the ICEPAK program in the suite and after I entered a minimum angle of 5 degrees (seemed reasonable to me), it predicted the following angles:

http://www.arrl.org/~ehare/temp/angles.jpg

The SNR is shown at:

http://www.arrl.org/~ehare/temp/snr.jpg

Note that the angles are only good while the SNR is reasonable. SNR looks a bit low to me, but I did select residential noise instead of rural quiet.

In case anyone would like a brief glimpse of the user interface for ICEPAK, see:

http://www.arrl.org/~ehare/temp/icepak.jpg

> Ed, at what elevation angle are the vertical and dipole about equal, say
> over very good ground?

Oh, you had to ask, after I didn't save my working files. Okay, I will do it again. The results of the two antennas over very good ground are shown at:

http://www.arrl.org/~ehare/temp.compare.jpg

I can't explain Tom's results through modeling, but he is a capable and qualified ham who has put a lot of effort into his testing. OTOH, the results I am getting appear to be consistent with what I would expect from theory for verticals and horizontal dipoles. I did not do my dipole model "droopy," but I don't expect that would make a lot of difference. I also tossed the tower into the model, but saw no real difference. Now, I didn't take much pains to get the model exact, and didn't do any convergence, but for the number of segments, I think I was okay. I wonder if there are any other antennas nearby that are affecting the dipole more than the vertical, because the models say that the dipole should outperform the vertical almost all the time, sometimes by quite a bit.

Tom, is the SWR bandwidth of the dipole about what you would expect to see? Could there be some feed-line losses that could explain the differences? I sure hate it when models don't agree with someone's reality; I rely on models a lot. :-)

BTW, it is late, so if I got any of the URLs wrong, give me what-for tomorrow and I will post a correction. I will clean out that ~ehare/temp area in a few days, so if they are gone, it is too late. Now, at 11:29, it is time to really go home. GN, all.

73,
Ed Hare, W1RFI

1443. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:39:46 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B85F78.D5900460@mindspring.com>
Source record: 181359

You wouldn't take a Collins 30-T (circa 1931)? Just kidding you. I would go for both. Gimme an SW-3 (the king of bloopers!) *and* a a 6L6 xtal rig, or better an 813 rig & VFO. Also, I would like a pre-WWI Marconi receiver, and a working spark TX please! I finally found a pristine Radiola III I could afford, so the appeal of the <1930 radio world is no longer abstract for me. Now, if they could just discover a *huge* cache of NOS 01A's, 10's, and 45's so their price could come down within reach, then I'd be satisified. I am just barely old enough to remember Radio Row on Rector St. (or was it Church Street?) in lower Manhattan. My dad took me there a few times (we had [still do] an SX-62 that kept blowing its output tube every month) the year before they kicked them all out to build the WTC. I remember the glow of tubes, and that tube smell, and the static and 'hets that warbled as the salesman turned the VFO knob. I went 'ooooh' and 'ahhhhh', and I still do, more than ever, now that I have my own toys and know how they work and how to work them. It took me 25 years between those days in the aisles of Barry Electronics, and the others, and getting my first ticket (though I was a *serious* SWL for many years, got a new R-7 for Christmas in 1977. It replaced my SPR-4, which replaced my SX-110, which replaced my NC-33, which my dad got me so I would leave his SX-62 alone), but that just shows you the hold that radio has on some of us.

de Will KD7BFX

"David J. Windisch" wrote:
>
> Collins?
>
> NAHHHHHHHHH. I'd be content with a blooper, a '210 TNT (heard what sounded
> like one in a pileup on 40 last eve), verticals, and, I did forget to
> mention, the sweet young thing's well-stocked junkbarn. You know, Dayton
> flea circus, Mendelssohns, Fair, ALL of ooooold Canal Street, 7th and Erie,
> Surplus Sales ...
> heavy sigh ...
>
> I'm a 'bird' myself: the 40 meter curmudgeon. You oughtta see my
> blackhawkornithopter. Only foreign signals allowed in my saltmarsh. No
> lids, no kids, no space cadets ...
>
> K3BHJ

1444. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 03:56:21 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39B86365.60AA@wt.net>
Source record: 181360

Jeff Goodspeed wrote:

>
> I am contemplating a distorted inverted Vee where one leg comes down
> relatively close to the tower while the other end can be run out to the
> front yard. The included angle will be a little less than 90 deg. between
> the legs. I can not feed this thing with open feed line because my ham shack
> is on the wrong side of the house and I have to thread my coax feed lines
> trough and around the crawl space.

I'd go this route myself. I'd stick with the center fed dipole, no matter how contorted, and coax feed, which you prefer anyway. If the tower effects the tuning of the dipole, just slightly vary the center point a few inches, and it should tune up. Or just move the legs around a bit until you get a better match. You'd have to try adding to one end or the other to find the best match. I'd fear increased TVI etc problems from the OCF antennas. But the dipole would be pretty much a single band antenna unless you added other legs, or went with a tuner elsewhere from 80m. Or managed to feed with twin lead and a tuner someway. MK

--
http://web.wt.net/~nm5k

1445. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 04:05:39 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B86593.28122151@bigfoot.com>
Source record: 181361

Jesper Wolf Jespersen wrote:
> Especially antennas like the G5RV where the dipole is active mostly on the
> low bands and the feeder starts to act as radiator on higher bands cannot be
> modeled this way.

The currents in the balanced feeder are designed to be balanced in the balanced 102ft G5RV physical dipole. Therefore, the balanced feeder is not supposed to radiate. Since modeling assumes balanced currents for balanced antennas, the model will not show feedline radiation. If there is feedline radiation, it is because of the environmental boundary conditions, something that most models don't handle very well, if at all.

It is current imbalance that causes feedline radiation and that will NOT happen when modeling balanced antennas with balanced feedlines.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1446. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 04:25:42 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B86A46.9993CC1A@bigfoot.com>
Source record: 181363

'Doc wrote:
>
> CAM wrote:
> > The difference is I can run 500 watts without owning a 500 watt
> > tuner. Compare the cost difference between 20 feet of ladder-line
> > and a 500 watt tuner. And I do the tuning from the operating
> > position with the tweek of a couple of (digital) knife switches,
> > easier than mucking with three (analog) knobs on a tuner.
>
> Yep, but the tuner will work for any antenna I put on the end
> of the feed line. You can't say that for your 'tuned' feed lines...

Of course I can say that. It has worked for *ALL* my antennas. The only
requirement is that the 450 ohm SWR be between 4.5:1 and 18:1 and it
has been for all the antennas I have installed. Very few antennas don't
have a 450 ohm SWR between 4.5:1 and 18:1
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1447. Bandwidth - 3 el 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 04:31:44 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39B86BFE.353ECEE4@bellatlantic.net>
Source record: 181362

What bandwidth should one expect to get with a
3 element yagi for 6 meters, using 7/8 tubing for
the elements and 44" spacing between, and using
1.7 to 1 as the SWR bandwith. Gamma match.
I'm getting very close to 1 MHZ, but I'm not
pleased with my mechanical design and will be
re-working things. I really hoped for the 2 mhz
another ham thought I could obtain, but I feel that
is unrealistic.

1448. Line radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 04:52:29 UTC
From: Jim <pinkston@networksplus.net>
Message-ID: <39b87136@news.networksplus.net>
Source record: 181364

Hello.
I've got a question that I hope someone can answer. In studying the ARRL Antenna Book it says that a folded dipole is a balanced antenna. It also says that a balun should be used when feeding a balanced antenna with an unbalanced line like coaxial cable. I think I've got that all right so far. My question is this. With a Decible Products antenna which has folded dipoles, should a balun be used between the antenna & the feedline? What are the problems if no balun is used?
I'm relatively new to this stuff so any info will be appreciated.
Thanks
Jim
KC0GSX

1449. 10-80m Multiband w/300ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 05:47:50 UTC
From: poofbutt@eudoramail.com
Message-ID: <39b97b37.20986331@news.gte.net>
Source record: 181366

Hi Guys!

I have a good working 40m (~66 foot) flattop dipole at about 30' fed with 75 ohm CATV coax presently.

What I would LIKE to do, is run about 135 feet of dipole, bending the ends down (90 degress) a bit in the trees that hold 'em, and feed it with 300 ohm coax and have it work decently on all bands 10-80m.

My rig is a Kenwood TS530S, and it the internal tuning circuit can handle (match?) loads from 25-200 ohms. The rig's actual input antenna load can handle 50-75 ohms.

I am thinking I will need a 4:1 balun to get the antenna load within range of my rig. (300 to 75 ohms) Does this sound correct?

Does anyone know if the 530S can handle broad enough tuning to work with this type of multiband dipole?

Also, is there a specific length of twinlead that would be best/optimal to use for best all around coverage?

I have a 3 element tribander (A3) for 10-15-20, so basically the multiband dipole would be for listening on those bands, but 12-17-40-80 would also be for xmitting.

Much thanks - Ed - KF6YKM - Southern California

edparry@gte.net

1450. Re: New Ham antenna questions....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 06:26:45 UTC
From: Will <wcwhite@mindspring.com>
Message-ID: <39B8868D.F4F03DA6@mindspring.com>
Source record: 181367

Scott,

A j-pole is a good antenna for VHF, and easy to make. If the tubing is too visible, I suggest contructing your j pole using either 300-ohm TV type twin lead (available at Radio Shack) transmission line, or even better 450 ohm window-line (like twin lead, but black, twice the width, and with little windows cut out of the center of the insulation. THis is easy to hide, you can even tape or glue it to some non-conductive surface (the side of the house for example) and paint over it.

de WIll KD7BFX

SMB wrote:
>
> I just got my first rig, a Yeasu FT-1500M as a gift and I want to build a
> J-pole antenna. I live in a jack-booted thug subdivision that has antenna
> restrictions, so I figure a J-pole made from .5" copper tubing, painted flat
> black and mounted to a vent pipe on the back side of the roof should be OK.
> I made the antenna and I have some questions about tuning it...
>
> Is there a good place to start, meaning, where should I put the connections
> to start with?
>
> Are the J-pole designs hard to get tuned?
>
> Does anyone have any other suggestions for stealthy antennas that perform
> well?
>
> thanks,
>
> Scott

1451. Re: 10-80m Multiband w/300ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:03:22 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B88F3A.B5B8A3D0@oio.net>
Source record: 181269

Snorky,
I think you would have better luck using a tuner, a 4:1 balun
with 300 ohm twin lead won't get the impedance in a usable range
on all the bands you want.
A 130' doublet fed with ladder line is the 'classic' all-band
antenna, but most descriptions assume your going to use a tuner.
They do work though.
'Doc

1452. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:10:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B890D7.1757AE9F@oio.net>
Source record: 181270

Bill wrote:
>
> Hi All,
> I have a telephone pole that is approximately 45ft high. I am planning on
> putting up a 10-15-20 tribander with a 18ft boom and a rotor.
>
> Has anyone seen an antenna and rotor like this mounted on top of a couple of
> lengths of conduit on the ground and pulled up next to the pole with a rope
> or cable ? Seems to me it could be done, but would like some feedback from
> anyone who may have tried to help find glitches in it before I try it (or
> not).
>
> Thanks,
> Bill

Must be hundreds of them! A couple of things to do is to
make sure the pole the rotor is mounted on is ~firmly~ anchored
to the 'T'-pole, and not too tall above the 'T'-pole. The mast
from rotor to antenna needs to be fairly short too. There's a
pretty good amount of torque developed by the rotor, and can
twist the pipe/pole/mast it's mounted on, if it isn't secured
well. Guying above the rotor is a real 'pain', so the mast needs
to be short between rotor and antenna.
'Doc

1453. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:15:38 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39b88d62.143345553@news.azstarnet.com>
Source record: 181271

On Thu, 07 Sep 2000 16:49:10 -0500, Jeff Goodspeed <cmsx42@email.mot.com> wrote:

>I thought I�d just add a little to the confusion. The antenna I am thinking
>of is a compromise upon a compromise. My 70-ft. tower is at the back of my
>small yard. The tower is 45 ft from by back door. It is 25 ft from the back
>property line and 35 and 45 ft from the side property lines. I have no other
>supports to use as the other end support for a classical dipole antenna, (no
>tall trees and the xyl would not stand for a structure in the front yard).
>Besides, 70 ft. is only a quarter wave above the ground on 80m anyway. An
>inverted Vee dipole is logical, except I don�t have enough space to run one
>of the two legs without ending up in a neighbor�s yard. I don�t want a
>vertical antenna and I don�t expect to have a DX cannon either.
>
>I am contemplating a distorted inverted Vee where one leg comes down
>relatively close to the tower while the other end can be run out to the
>front yard. The included angle will be a little less than 90 deg. between
>the legs. I can not feed this thing with open feed line because my ham shack
>is on the wrong side of the house and I have to thread my coax feed lines
>trough and around the crawl space.
>
>I have an article from QST from the early 90s that talks about off-center
>feed dipoles. They were using them on multiple bands where they worked on
>even numbered harmonics of the fundamental resonance length. I only want to
>use it on one band. The two features I liked was keeping one leg short while
>getting a much wider bandwidth on 80/75m than a normal dipole.
>
>Basically, you take a half wave wire cut for 3.75 MHz. and cut it in half so
>one leg is one third the total length and the other is two thirds the total
>length. I could keep the short leg close to the tower and run the long leg
>out to the front yard. This would keep the current maximum higher off the
>ground and would be more horizontally polarized. The feed point impedance
>was supposed to be about 300 ohms (for a flat dipole)(4 x 75 Ohms) with a
>2:1 bandwidth that covered the whole band. In the inverted Vee config, I am
>guessing that the impedance will drop bringing it closer to 50 Ohms.
>
>So I needed a 4:1 balun to do all of this.
>
>I know that high SWR does not appreciably affect the efficiency of a dipole,
>and I do have a home brew antenna tuner that can handle the job. I just
>wanted to stay away from high SWR on the feed line in case I ever run a full
>1.5 KW of power. I would not want the coax break down on me.
>
>Jeff KA9S

Jeff,

You certainly could try the off-center feed. Further info was published in the ARRL Antenna Compendium, Vol. 3, pp 66-75. Both this paper and the one I believe you reference have designs for 4:1 ferrite loaded baluns. The half-wave balun you first inquired about would certainly work as well, but it is a single band solution.

There was an article in the old Ham Radio Magazine that did an analysis of the half-wave balun. I have it somewhere but my retrieval "system" is less than good, so I'm not sure I can find it quickly. As I recall, tinkering with the impedance of the half-wave section had some desirable effect on the operational bandwidth. (Your 75 ohm may be just the ticket.)

Wes N7WS

>
>Jeff Goodspeed wrote:
>
>> I�m procrastinating putting up a wire antenna for 80/75 meters. The
>> antenna will only be used on this one band. I am considering several
>> antenna types and I intend to feed it using 50-Ohm coax. Some designs
>> require a 4:1 balun. For decades, I have seen a 4:1 balun described
>> which used a 1/2 wave loop of coax to accomplish the impedance step up:
>>
>> O O
>> _|_ |
>> | | |
>> | | |
>> | | | <-- 1/2 wave
>> | | |
>> | | |
>> | |__|
>> |
>> |
>>
>> Has anyone ever used this homebrew balun? Does it eliminate current from
>> flowing down the outside of the feed line? Is the performance bandwidth
>> wide enough to cover all of 80/75 m? Can 75-Ohm coax (RG-11) be used for
>> the wave loop if the rest of the feed line is 50 Ohm (RG-213)? (I m
>> cheep and I have some RG-11 lying around)
>>
>> The weight and size of such a large coil of coax is not an issue for me
>> as the feed point will be at my tower and not suspended in mid-air.
>>
>> What do you guys think?
>>
>> Jeff KA9S
>

1454. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:31:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B895ED.DC62D746@oio.net>
Source record: 181273

Fractenna wrote:
>
> ------clipped-----
>
> So, you feel that because you messed up, that its ok to strike out at others
> you perceive as targets...that about the gist of it 'Doc'?
>
> 73
> Chip N1IR

Ooo Chip! You know what happens when you make assumptions
you shouldn't, especially with no 'fact' to back it up. And
would you kindly point out to me where I "messed up"? There
is a saying in Arkansas... Suuuuuu-eeeeeeee! Sue! Sue Sue!
(Sound familiar?)
'Doc

1455. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:35:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B896A9.AAD482A1@eznec.com>
Source record: 181272

CAM wrote:
>
> The currents in the balanced feeder are designed to be balanced in the
> balanced 102ft G5RV physical dipole. Therefore, the balanced feeder is
> not supposed to radiate. Since modeling assumes balanced currents for
> balanced antennas, the model will not show feedline radiation. If there
> is feedline radiation, it is because of the environmental boundary
> conditions, something that most models don't handle very well, if at all.
>
> It is current imbalance that causes feedline radiation and that will NOT
> happen when modeling balanced antennas with balanced feedlines.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

Method-of-moments modeling programs like those based on MININEC or NEC don't make any assumptions about current balance. The only assumption they make is that the current varies in a particular manner over a segment or "pulse". In MININEC, the current is assumed to be constant over the "pulse" which extends from the center of one segment to the center of the next. In NEC, the current is assumed to have the shape of a piece of a sinusoid over a segment. The programs calculate the self and mutual impedances of each segment or "pulse" relative to every other one, then using the voltages produced by the sources, calculate the currents on each segment or "pulse" using Ohm's law. It's certainly possible to model both imbalanced antenna and feedline currents with these programs. The main limitation to accuracy is the uncertainty about the path common mode feedline currents take to the ground in the actual installation.

Roy Lewallen, W7EL

1456. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:36:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B896EA.C46E0F57@oio.net>
Source record: 181274

Reg Edwards wrote:
>
> Peter wrote -
> > we need to elect someone like Chalton Heston as the
> President of the
> > ARRL, maybe then "we the people" will get to keep the
> spectrum that we
> > already own!
> ========================
>
> HAMS ! ARM YOURSELVES !
>
> TO THE BARRICADES !

I like the response of the bowmen after the battle of
Aggincourt... (excuse the spelling).
'Doc

1457. Re: Boris with the Bulging Eyes...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 07:44:50 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8p9t1ovnj1@slb2.atl.mindspring.net>
Source record: 181365

Fractenna <fractenna@aol.com> wrote in message
news:20000907204904.20156.00000135@ng-da1.aol.com...
> Well, so far tonight I see that I, allegedly:
>
> 1) have no respect from "professionals";
> 2) stole fractal antennas from some Siberian mad scientist-- which sounds
a
> lot like 'Badenov'.
>
> I suppose this makes me a cross between Rodney Dangerfield and 'Mr. Know
it
> All'.

Nobody mentioned the fractal antenna's tendency to emit spurious N-Rays. It was an off-night. Newsgroups have slumps, just like athletes.

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

1458. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 09:42:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pac82bpc1@uranium.btinternet.com>
Source record: 181275

Tom you are quite correct. It is impossible for cable
impedance Zo to behave is such a weird manner.

Explanation - the measuring instrument or measurement
method was grossely in error.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

1459. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 09:51:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pad4vevq1@slb1.atl.mindspring.net>
Source record: 181276

Thread:

I worked in downtown Atlanta for a number of years and my office window looked right out over the GA Tech campus at about the 40th floor level.

I always wondered when I looked at the midtown AM antenna of WSB...

WSB's AM clear channel MW tower is in midtown Atlanta. What are the EMI levels a few blocks away at several hundred feet above sidewalk level?

In some of the local Atlanta skyscrapers, say the BellSouth tower or NationsBank tower, etc... the folks sitting at their office desks 8 hours per day 5 days per week probably feel that they can almost reach out and touch that 50 kW clear channel MW antenna.

Just wondering?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:Quzt5.551$u95.1424833@news.ntplx.net...
> Hi, Cortland,
>
> I have personally talked to FCC staff who have investigated and required
> correction of the few cases of BC stations exceeding the limits. If you
> know of a station whose general public level exposure is > the FCC regs,
OET
> would want to hear about it, I am sure.
>
> I wonder what type of BC station is involved. Though a simplification,
here
> is the EZNEC predicted H field for a .625 lambda vertical with 65 .625
> lambda radials up a few inches over average ground:
>
> The antenna would have to be really close to the street. Now, for phased
> arrays, this can go up by 10 dB, but that would still be very close by
most
> BC station standards.
>
> The limit on 1 MHz is 1.63 A/m.
>
> EZNEC/4 ver. 2.5

>
> BC vertical 09-06-2000 18:16:11
>
> --------------- NEAR-FIELD PATTERN DATA ---------------
>
> Frequency = 1 MHz
> Power = 50000 watts
> Max field = 82.39861 A/m RMS
> at X,Y,Z = 1, 0, 6 ft
>
> Magnetic (H) Field (A/m RMS)
>
> X (ft) Y (ft) Z (ft) Hx Mag Hy Mag Hz Mag Htot
> 0 0 6 .00023354 9.518E-05 .00015233
.00028291
> 1 0 6 .00013745 82.39861 .00466929
82.39861
> 2 0 6 .00016065 2.644561 5.517E-05
2.644561
> 3 0 6 .00015466 2.942978 6.074E-05
2.942978
> 4 0 6 8.550E-05 2.414151 7.770E-05
2.414151
> 5 0 6 .0001123 1.969134 6.480E-05
1.969134
> 6 0 6 .00011719 1.646448 4.804E-05
1.646448
> 7 0 6 .00012096 1.409054 .00038042
1.409054
> 8 0 6 .00012971 1.231556 4.686E-05
1.231556
>
> use cursor keys to scroll <ESC> to return to
> menu
>
> The limits on FM and TV frequencies are lower, typically around 27.5 V/m.
> They do have higher gain antennas, of course, but by design, they radiate
> energy at the horizon, not below the antenna. The antennas are typically
> stacked at various heights on a very big tower, and that tower is
typically
> fenced. This is why most BC stations do comply with the rules. If I
> understand correctly, they need to document to the FCC that they are in
> compliance, though I don't know about any grandfathering of older
stations.
>
> 73,
> Ed Hare, W1RFI
>
> Cortland Richmond <Cortland.Richmond@usa.alcatel.com> wrote in message
> news:39B6799D.700623BE@usa.alcatel.com...

> > Ed,
> >
> > Without endorsing the ongoing flame wars, I will mention Needham, MA,
> where I
> > understand that at street level the total fields well exceed the limits
> 24/7.
> > Granted, not due to cell-phone towers. But broadcasters for some reason
> don't seem
> > impelled to cut power.
> >
> > Cortland
> > (ka5s@saber.net - who speaks only for himself and not for his employer)
> >
> > W1RFI wrote:
> >
> > > >Compare this to operators of cellular-phone systems, wireless
> > > >networks, studio-transmitter links, and other fixed point-to-point
> > > >and satellite installations in highly populated environments,
> > > >not to mention cell-phones and other devices themselves, all of
> > > >these operating well into the UHF-plus part of the spectrum.
> > >
> > > >Many, many of these are woefuly far from compliance, as are a
> > > >good number of FM broadcast and TV stations.
> > >
> > > Could you share with us the evaluations you have done on these
stations
> to
> > > demonstrate that they are woefully out of compliance? I have done
some
> rough
> > > calculations for a few cellular installations for hams with quesitons
> and
> > > determined that they were well within compliance. The broadcast
> stations have
> > > much more stringent requirements than Amateur Radio, so I am curious;
on
> what
> > > basis have you determined non-compliance?
> > >
> > > 73,
> > > Ed Hare, W1RFI
>
>
>

1460. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 09:56:46 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8paden$n4t$1@slb1.atl.mindspring.net>
Source record: 181277

Adam:

Hey get out of here with that MA [in Physics] there's a real Physics
Professor with a Ph.D. on this thread!

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
H. Adam Stevens <solo@totalaccess.net> wrote in message
news:8p6o33$713$1@nntp.ixcis.com...
> not quite
> classical electrodynamics breaks down when the frequency is high enough
> we must use quantum mechanics to successfully model nature here
> when one gets into the microwave region, quantum mechanics rears it's
ugley
> head, so to speak
> photon absorption in water molecule spin states occurs
> one cannot excite a quantum-mechanical transition with photons of
> insufficient energy (frequency) no matter how many one uses (how much
power)
> the meat may very well cook by other means (currents), much less
> efficiently, but there's a reason for the microwaves, and it's to spin the
> water molecules
>
> if you MUST use classical thinking, it is one HELL of a resonant
absorption
>
> what worries me is the quantum chemistry related to exposure to microwave
> and higher energy radiation as opposed to 4MHz stuff, but how many
> physicists are in this debate among biologists who know little of the
> interaction of radiation with matter and lawyers, who know even less
> sigh
> H.
> H. Adam Stevens, M.A. (in physics)
> WA5IGW
>
>
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
> news:uZgt5.525$u95.1378156@news.ntplx.net...
> > Yuri Blanarovich <k3bu@aol.com> wrote:
>
> snip

> > > (we know that 430 MHz and up can start cooking the tissue, but not
> > cancer). My
> > > chicken gets cooked in microwave oven, it doesn't get the cancer :-)
> >
> > There is nothing magical about the 430 MHz and up frequencies; if one
> could
> > efficiently couple 500 watts of 100 MHz into a cubic foot of space, it
> would
> > cook as well. Watts are watts, at any frequency.
> snip
> > 73,
> > Ed Hare, W1RFI
> >
> >
> >
> >
>
>

1461. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:01:29 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8padm4$j4e$1@slb6.atl.mindspring.net>
Source record: 181278

Hey:

All of those attributes are fine for the "normal", but... I like em
"kinky", Britney would be fine if she used a fractal antenna in her
ministrations.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
David J. Windisch <davidw@copper.net> wrote in message
news:q8ot5.9280$B54.25735@newsfeed.slurp.net...
> Britney Spears?
>
> Nahhhh. My idea of a sweet young thing is at least 55, with resume, 3
refs
> with fone numbers, a solid net-worth statement, a 500-acre salt marsh, and
> an Extra.
>
> K3BHJ
>
>

1462. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:22:34 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B8BDEA.DA91ADC@oio.net>
Source record: 181280

Tom W8JI wrote:
>
> On Thu, 7 Sep 2000 17:54:15 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
> wrote:
>
> >What mode or operating technique that hams have figured out how to use
> >efficiently has been reallocated from the amateur radio service?
> >
> >73,
> >Ed Hare, W1RFI
>
> Spark Ed! The FCC has ripped us of by not allowing us to use spark,
> and it's all your fault!
>
> Seriously, I'd like to see the ARRL ask for a narrow mode segment on
> 160 meters. One for RTTY, PSK, CW, and other narrow modes...just like
> all the other bands have. If the ARRL did that, I'd support them like
> they were the best thing since sliced butter!
>
> Why does the ARRL think 160 is any different than the other bands from
> 80 through 2 meters?
>
> 73 Tom

I think you may have that a little 'backwards'. The ARRL never
had any say in what modes are used in which portion of the bands.
They ~suggest~ bandplans, but that's certainly not binding.
'Doc

1463. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:31:17 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <A63u5.606$Ek.2650@newsfeed.slurp.net>
Source record: 181279

ARM OURSELVES ... TO THE BARRICADES ... with unregistered automatic weapons!!!!!

1. completion of dashes.

2. tuners

3. rotator controls

4. antenna switching

5. dupe-checking

6. antenna raising/lowering

7. gain control

8. vswr shutdown

Your turn.

K3BHJ

1464. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:37:47 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Hc3u5.609$Ek.2907@newsfeed.slurp.net>
Source record: 181281

Wellllllllllllll, I'm gonna get something else I've wanted since '57: a
'57 'Vette!

K3BHJ

1465. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:46:03 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <qk3u5.611$Ek.2709@newsfeed.slurp.net>
Source record: 181282

HEY! Save your hay! You may marry a horse!

I like my perversions better than yours, you ... you ... prevert (sic)!

An amendment:

My idea of a sweet young thing is at least 55, with resume, 3 refs with fone numbers, a solid net-worth statement, a 500-acre salt marsh, a well-stocked junkbarn or two, and an Extra. SEND PIX OF SALT MARSH AND BARN(S).

K3BHJ

(is a tic a technical intellectual curiosity, or tongue-in-cheek?)

1466. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 10:55:34 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <lt3u5.618$Ek.2733@newsfeed.slurp.net>
Source record: 181283

Hi, Steve, et al.:

Some of us have organized a self-help group for replying-to-troll addicts. It is a slice of life from the NG, and its occasionally-disregarded motto, pledge, and mantra are identical:

DO NOT RESPOND TO TROLLS*.

Come and join us. We're as close as this NG, and we'd love to have you. I myself was pulled back from the abyss just the other day by a fellow member.

BTW, the private e-mail is deliciously funny.

Fellow members: with apologies to the Grimm Brothers, could we adopt 'Billy Goats Gruff' as our group monicker?

73, Dave, K3BHJ

_____
*Especially F-word trolls.

1467. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 11:01:14 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39B8C6FA.79B75009@attglobal.net>
Source record: 181284

Thanks Scott. that's what I thought. I guess everyone at the little swap meet said to them selves..."well, there goes a real sucker!" Live & learn!

scott_evans50@hotmail.com wrote:

> Forget it, it's CB'er eye candy. The two springs are loading coils to
> tune it for use in the 11 meter band. As for being able to operate both
> 11 and 10 meters with a 5 foot antenna.. forget that also! The very
> best antenna for 10 meters is a simple stanless steel 108 inch whip
> from Radio Shack. Without the heavy spring it's just right to use on 10
> meters. With the spring it's just right for 11 meters. You really don't
> need the spring with the antenna and an antenna tuner will match it for
> use on both bands. This is a simple 1/4 wave antenna and so no loading
> inductors are required and the match will be very close to 50 ohms also.
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1468. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 11:50:19 UTC
From: fractenna@aol.com
Message-ID: <20000908075019.20258.00000158@ng-da1.aol.com>
Source record: 181285

>Fractenna wrote:
>>
>> ------clipped-----
>>
>> So, you feel that because you messed up, that its ok to strike out at
>others
>> you perceive as targets...that about the gist of it 'Doc'?
>>
>> 73
>> Chip N1IR
>
> Ooo Chip! You know what happens when you make assumptions
>you shouldn't, especially with no 'fact' to back it up. And
>would you kindly point out to me where I "messed up"? There
>is a saying in Arkansas... Suuuuuu-eeeeeeee! Sue! Sue Sue!
> (Sound familiar?)
> 'Doc

One of my new students is from rural Arkansas. Incredible attitude of opportunities, but a little overwhelmed. Working with him and others really makes me super happy in this job.

Believe me-- this guy isn't calling pigs. And I'm sure that in a few years he can be called 'Doc' without some un-earned nick name.

73
Chip N1IR

1469. Re: ����Ц��□��□�

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 11:50:41 UTC
From: HXiaoguang <jungle0355@sina.com>
Message-ID: <8paj9a$ie3$1@news.cz.js.cn>
Source record: 181406

���� h��.
----- Original Message -----
From: YuanQing
To: Everyone List Member
Sent: Thursday, September 07, 2000 7:08 PM
Subject: Fw: ����Ц��□��□�

���챨��

----- Original Message -----
������: YuanQing
�ת���: Everyone List Member
����ʱ��: 2000��9��6��
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���Ї���email to: yuanqing@enreach.co.cn

Thanks.
YuanQing

----- Original Message -----
������: Wangyue
�ת���: Everyone List Member
����ʱ��: 2000��9��4��
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1470. RE: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 12:04:16 UTC
From: fractenna@aol.com
Message-ID: <20000908080416.20258.00000159@ng-da1.aol.com>
Source record: 181286

Well Steve,

I assume you enjoyed your last (abusive) post: it ended up twice on AOL anyway.

READ my info carefully. I said that your design does not work as you describe. This is from my EXPERIENCE--as I said-- with those spirals, which often are the 'base' antenna I am ask to improve upon in RFID applications at Fractal.

I did not imply that you should take that personally, but as a motivation to re-check what you did.

It is impossible to get a high radiation resistance at the current max without duplicate current max's. See what happens to yours. Then notice how much wire you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2 waves of wire.

That's all I will say: I graciously offered to look at the file and give you feedback--AS ANY PROFESSIONALY WOULD DO TO ANOTHER. Because you are being abusive, I will not do so now, as I feel that you, as president of Cushcraft, are not acting as a professional but as a competitor.

I will honor your submission under the rules should you have something to submit, but further keep in mind that if we are to entertain the possibility that you DO have a 'winning entry' then what kind of person are you for libeling someone about to give you $1000?

As for the MI2 file: I have, in the past, given this file out on: NEC-LIST (with a free video also); Rec.radio.amateur.antenna; and fractalantenna@egroups.com. Now I only honor requests from those on the fractalantenna reflector, and certainly none from those who abuse.

So basically the answer is that I do not consider you a colleague, or one evincing professional behavior and will not honor your request, should it come from the proper channel.

Next time, before you close doors, find out the size of the building.

Chip N1IR

1471. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 12:11:49 UTC
From: w1rfi@aol.com
Message-ID: <20000908081149.20706.00000217@ng-cf1.aol.com>
Source record: 181287

>From: k1bqt@aol.com (K1BQT)

>Most of us know "real-world" ham friends who run power at HF, but manage to
>knock out the phones and most of the processor-driven electroincs in their
>houses because some of the energy earmarked for the antenna terminals doesn't
>get there.

The levels in various immunity standards are approximately 3 V/m. The levels
in the RF exposure standards are >= 27.5 V/m. It is very difficult to
correlate RFI and RFX issues with 20 dB of difference between the two.

73,
Ed Hare, W1RFI

1472. (none)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 12:24:27 UTC
From: n3dok@pgh.NET
Message-ID: <39B8DA97.B5CFFB76@pgh.net>
Source record: 181288

unsubscribe

1473. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 12:32:19 UTC
From: richardharrison@webtv.net
Message-ID: <8759-39B8DC53-6@storefull-117.iap.bryant.webtv.net>
Source record: 181289

Wayne GHrauel wrote:
"Live and learn."

Mobile whip springs are not loading coils. Inside should be an intact strap to short out the spring. Bend the spring over and have a look. If the shunt is missing or broken the spring should be discarded.

A 5-foot whip is too short to be a quarter-wave at 10 meters without a loading coil. It is near 1/4-wave at 6 meters.

108 inches is 9 feet or about 2.74 meters or about 1/4-wave at 11 meters. A whip this length may actually be too long in the 11-meter band. High voltage at the tip of the antenna actually increases its apparent capacitance. This effect depends on the length to diameter ratio of the wire, but the usual rule is to shorten a whip 5% for "end effects". This makes the 11-meter whip 102 inches long.

A 5-foot whip will need a loading coil to resonate at 10 meters. You could also consider a large capacitive hat to resonate the whip at a lower frequency. The hat doesn`t have so much resistance to lower the efficiency of the whip as a coil does. A combination of loading methods can be used. You can check for resonance with whatever instruments you may come by.

When resonant at 1/4-wave, the impedance will not likely be too close to 50 ohms. A 1/4-wave vertical is 1/2 of a 1/2-wave dipole. The other half of the antenna is supplied by its image in the ground, car body, ground plane, or what have you. The dipole in space has 75 ohms impedance and 1/2 of that is about 37 ohms. the environment of the whip will shift its impedance also and it may well be less than 37 ohms. You may consider 37 ohms close enough to 50 ohms and that`s just fine too.

Some would prefer the convenience of a short loaded whip. Most CBers do. That`s why you see those little whips emerging from various sizes and shapes of coils. It isn`t as efficient as a full-sized whip but may be plenty good enough.

Best regards, Richard Harrison, KB5WZI

1474. Re: Line radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 12:37:32 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39B8DD8C.5CCA8CBF@dialpoint.net>
Source record: 181291

The balun thing is really over worked. While pure theory says you should have one, many times you do not. If the DP antenna is one designed for the vhf/uhf bands I am sure they would have one if it is needed.

Jim wrote:
>
> Hello.
> I've got a question that I hope someone can answer. In studying the ARRL
> Antenna Book it says that a folded dipole is a balanced antenna. It also
> says that a balun should be used when feeding a balanced antenna with an
> unbalanced line like coaxial cable. I think I've got that all right so far.
> My question is this. With a Decible Products antenna which has folded
> dipoles, should a balun be used between the antenna & the feedline? What
> are the problems if no balun is used?
> I'm relatively new to this stuff so any info will be appreciated.
> Thanks
> Jim
> KC0GSX

1475. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 13:05:25 UTC
From: fractenna@aol.com
Message-ID: <20000908090525.20802.00000181@ng-fc1.aol.com>
Source record: 181290

>The levels in various immunity standards are approximately 3 V/m. The levels
>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>correlate RFI and RFX issues with 20 dB of difference between the two.
>
>73,
>Ed Hare, W1RFI
>
>

10 dB between those two values...

73
Chip N1IR

1476. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 13:46:15 UTC
From: richardharrison@webtv.net
Message-ID: <8757-39B8EDA7-28@storefull-117.iap.bryant.webtv.net>
Source record: 181295

Chip wrote:
"10 dB between those two values."

That`s the trouble with using "field strength" to mean power per square meter and also volts per meter.

Ed was using the ratio between two volts per meter values which were about 10 to 1. Thus, Ed Hare correctly called it a 20 db difference where the voltage ratio is 10 and the power ratio is 100. When you multiply the volts by 10 you automatically multiply the current by 10 also, in a linear resistance, and thus the power is multiplied by 100 times.

Best regards, Richard Harrison, KB5WZI

1477. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 13:51:23 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8par9b$4q5$1@iac5.navix.net>
Source record: 181292

Is this the same Chip that has responded to others experience as "anecdotal" and that only the scientific method means anything?

How dare you to presume that a PhD in listening to noise from the cosmos approaches Steve's qualifications in antennas. You are one supercilious bastard!

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000908080416.20258.00000159@ng-da1.aol.com...
> Well Steve,
>
> READ my info carefully. I said that your design does not work as you describe.
> This is from my EXPERIENCE--

1478. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 13:56:50 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B8F022.CE1C3901@bigfoot.com>
Source record: 181293

Roy Lewallen wrote:
> It's certainly
> possible to model both imbalanced antenna and feedline currents with
> these programs.

Roy, Since all elements of a G5RV dipole antenna model are symetrically balanced, how can EZNEC possibly report imbalance? The argument is not whether EZNEC *can* handle imbalance. The argument is whether EZNEC can possibly generate imbalance in a perfectly balanced antenna system.
--
http://www.mindspring.com/~w6rca

1479. Re: 27,hz station master antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:08:19 UTC
From: Adam <jabbaSPAMJAM@w3.to>
Message-ID: <39b8f716@grissom>
Source record: 181298

Whats Up DOC.... Sorry couldn't resist :-)

Tricky Dickys still sell the station master, they were and still are made by Mobile One Australia. If you want to home brew one try http://www.wildnet.com.au/users/amateur_radio/ click on the buttons on the Icom when it loads for antenna calculators (4th and 5th one from the top), there is one there for a 1/2 wave and a 5/8 vertical.

Failing that why not just go out and buy a second hand station blaster... if your shrewd you can usually pick them up in the trading post for $25 or so. The only difference between 10 and 11m is the length... just shorten it down a little... the tap doesn't usually get touched at all.

--
Regards
Adam VK4LAJ

My wife says that never listen to her...
At least thats what I think she said?

"DOC" <smashed_59@hotmail.com> wrote in message
news:2gqdrs8pap3ut1b18jnoj249hp5trh72hh@4ax.com...
> g'day alll
> i'm thginking abt makeing a homebrew antenna like the
> 27mhz station master antenna , not sure who made it but i know tandy
> and dick smiths used to sell them ,anyways i want to make it so it can
> be used on the 10 metre band , but i am after the original
> measurements for the antenna ..if anyone can help me out it would be
> greatly appreaciated
>
> thanks in advance

1480. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:09:51 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <ks6u5.586$u95.1528768@news.ntplx.net>
Source record: 181294

Fractenna <fractenna@aol.com> wrote in message
news:20000908090525.20802.00000181@ng-fc1.aol.com...

> >The levels in various immunity standards are approximately 3 V/m. The
levels
> >in the RF exposure standards are >= 27.5 V/m. It is very difficult to
> >correlate RFI and RFX issues with 20 dB of difference between the two.

> 10 dB between those two values...

I rounded 19.42 dB up to 20 dB for the purposes of discussion.

73,
Ed Hare, W1RFI

1481. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:15:16 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39B8F474.41C67EA6@my-deja.com>
Source record: 181296

Wayne Grauel wrote:
>
> OK Folks... here it goes. I have a 96 Suburban that I want to
> mount an antenna for 10 meters (without drilling holes in my
> vehicle). I currently made a mount from steel that comes out
> from under the rear bumper/drivers side (so doors will open).
> This antenna was a ham fest acquisition and the notation said
> it was very broad banded for 10 & 11 meters. it's shiny, has
> two big coils (like springs, not wound coils) and is about 5
> feet tall or so and aparently isn't worth a hoot!. I have no
> directions. When mounted it sticks up past the roof about 1.5
> maybe 2 feet. I took my TS440SAT out and placed it on the fron
> seat (coax is in the vehicle, not running outside).
> SWR's were through the roof. The vehicle was sitting beside
> the house in the driveway.
>
> I have a hunch this is a glorified CB antenna. The AT would
> tune it but not above 29 MHZ. I'd kinda like to have an
> antenna that will tune to a reasonable SWR so I can use my
> little IC706 (no tuner) .
>
> Well everyone, did I give you enough info to point me in
> the right direction, do I start cutting wire off the
> antenna (whip is adjustable), or do I shit-can it and
> find a ham stick. It is adjustable to about 4 inches before
> it bottoms out.
>
> Inclusion.... here's a thought, does anyone think that by
> removing one of the sets of "springs" this would place it
> in the 10 meter band???? I'm assuming a 10 meter antenna
> will be shorter than an 11 meter antenna...no?
>
> Back to original post....
>
> I'm just not sure which way to go or what is the culprit.
>
> I'd really like to stay with a bumber mount of some kind
> and not have some huge mast on top of the roof, etc.
>
> TNX
> Wayne
> N3TNS

Well, what you have is probably a CB antenna, but there is nothing
wrong with using it on 10 Meters. 11 Meters is close enough
to 10 so that most any CB antenna can be adjusted to work well.
I have one on my house and on my car.

The one on my house is effectively a vertical dipole that's
up about 25 feet. It does an excellent job.

The one I use on my car is a little 3 foot whip with a
loading coil in the magnetic mount base. I purchased it at
Radio Shack. Using my HTX-100, and the antenna on the back
of my 1989 Firebird, I have no trouble talking to the mid-west
or the east-coast, from Phoenix. I even did some testing at
the 5 Watt level with some stations in Virginia, while I was
driving home from work. I was a little low on the S-Meter,
but there was still solid copy.

The two big shiny coils, on your antenna, are just springs.
If you bend them over you should find a ground strap inside
shorting out the whole thing. If that strap isn't there, or
the strap breaks, that spring can cause lots of hash and
noise. If you keep them, make sure the ground strap is good.

But before you throw the whole thing away, I would suggest
borrowing a Antenna Analyzer from a friend (something like a
MFJ 259) and find out what the antenna is actually set up for.
It may be quite usable with just a little tune up. However,
don't expect the SWR to be flat from 27 to 30 MHz. Short
whips are a little narrow banded so just optimize it for
the area you need. Usually the only adjustment would be the
length of the whip. The Antenna Analyzer will tell you very
quickly whether the whip is to short, or to long, or just a
piece of junk.

Other posters have suggested that the optimum is a 108 Inch
whip, and they are probably right. If you can't make your existing
antenna work, it would be a good avenue to persue.

Good Luck

Martin K7MEM

--
Martin E. Meserve K7MEM martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1482. Re: 10-80m Multiband w/300ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:16:44 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B8F4CC.9DC5D3A5@bigfoot.com>
Source record: 181297

Snorky wrote:
> What I would LIKE to do, is run about 135 feet of dipole, bending the
> ends down (90 degress) a bit in the trees that hold 'em, and feed it
> with 300 ohm coax and have it work decently on all bands 10-80m.

I assume that the "300 ohm coax" is a typo. There does exist shielded
300 ohm line called TwinAX. Are you talking about that?

> I am thinking I will need a 4:1 balun to get the antenna load within
> range of my rig. (300 to 75 ohms) Does this sound correct?

The impedances you are likely to encounter may range as low as 20 ohms.
A 4:1 balun will try to take 20 ohms down to 5 ohms. On the other end,
you may encounter 4K ohms which the 4:1 balun takes down to only 1K ohms
assuming it can handle the 4k ohm load. In addition, you may encounter
something like 2000 +j2000 ohms which the 4:1 cannot handle very well.
Your idea of using a limited range tuner with an antenna like the above,
is heartburn city. A wide-range link-coupled tuner is best for this
antenna.

> Does anyone know if the 530S can handle broad enough tuning to work
> with this type of multiband dipole?

A subset of the method I use for matching would be ideal for your
application. Choose a feedline length for each band that will
resonate the antenna system in the middle of the band and then
use your built-in tuner to cover the whole band. I use knife
switches mounted in my ham shack window to tune all the HF bands
with no antenna tuner required at all.

> Also, is there a specific length of twinlead that would be
> best/optimal to use for best all around coverage?

Follow the links on my web page to my All-HF-Band-Antenna to get
an idea of what is necessary to accomplish what you are trying to
accomplish. What will work for you is a subset of what I have done.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1483. Re: Line radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:30:31 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B8F807.77DC995D@bigfoot.com>
Source record: 181302

Jim wrote:
> What are the problems if no balun is used?

Good engineering practice calls for a balun (BALanced to UNbalanced) function at every balanced to unbalanced transition. Assuming a coax/twinlead junction, a properly functioning current balun will keep common mode currents from flowing on the outside of the coax and will ensure that the differential currents in the twinlead are balanced thus preventing more than a negligible amount of feedline radiation and conducted common mode currents. Whether feedline radiation and conducted common mode currents are an appreciable problem depends on the application and the user's tolerance level. My tolerance level is low.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1484. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:32:17 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8f737.34425287@news.akorn.net>
Source record: 181300

On 08 Sep 2000 13:05:25 GMT, fractenna@aol.com (Fractenna) wrote:

>>The levels in various immunity standards are approximately 3 V/m. The levels
>>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>>correlate RFI and RFX issues with 20 dB of difference between the two.
>>
>>73,
>>Ed Hare, W1RFI
>>

>10 dB between those two values...
>
>73
>Chip N1IR

Dear Dr. Cohen,

27.7/3 is a ratio of 9.16.

dB is 20 log ratio when dealing with voltage.

20 log of 9.16 is 19.23.

Please tell me what the under educated masses are missing, Dr. Cohen.

73 Tom PDH (pretty dumb ham)

1485. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:35:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8f89e.34784327@news.akorn.net>
Source record: 181301

On Fri, 08 Sep 2000 05:22:34 -0500, 'Doc <w5lz@oio.net> wrote:

> I think you may have that a little 'backwards'. The ARRL never
>had any say in what modes are used in which portion of the bands.
>They ~suggest~ bandplans, but that's certainly not binding.
> 'Doc

The ARRL chose to not ask for a segment. Prose Walker told me the FCC would have no problem granting one when the band was restored, if the ARRL asked.

1486. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:38:10 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8f91c.34910383@news.akorn.net>
Source record: 181303

On 08 Sep 2000 11:50:19 GMT, fractenna@aol.com (Fractenna) wrote:

>opportunities, but a little overwhelmed. Working with him and others really
>makes me super happy in this job.

.....and them super sad.

>Believe me-- this guy isn't calling pigs.

He never calls you?

>And I'm sure that in a few years he
>can be called 'Doc' without some un-earned nick name.
>73
>Chip N1IR

After a few years with you, he'll probably need a doc.

73 Tom

1487. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:39:40 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39B8FA2B.79E59DA8@fgi.net>
Source record: 181299

Roy Lewallen wrote:

> snip

> -of-moments modeling programs like those based on MININEC or NEC
> don't make any assumptions about current balance. The only assumption
> they make is that the current varies in a particular manner over a
> segment or "pulse".SNIP

> . The main limitation to accuracy is the uncertainty about
> the path common mode feedline currents take to the ground in the actual
> installation.

>
> Now THAT I find extremely interesting !

In my present set up I route the coax THRU the boom.
Most books say' hang' the feed' which also has draw backs
But if the feed lines can affect calculated patterns or
antenna performance on the increasing used results of computor
programing such as EZNEC, then maybe it is time for all to rethink
or re-evaluate the implications of feed methods and construction
Possibly some could share their thoughts.
Appreciate the input Roy
Regards
Art Unwin KB9MZ

>
> Roy Lewallen, W7EL

1488. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:42:27 UTC
From: 2w8ji@contesting.com
Message-ID: <39b8f9ee.35120032@news.akorn.net>
Source record: 181304

On 08 Sep 2000 12:04:16 GMT, fractenna@aol.com (Fractenna) wrote:

>It is impossible to get a high radiation resistance at the current max without
>duplicate current max's. See what happens to yours. Then notice how much wire
>you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2
>waves of wire.

Chip has some odd notion the more wire you pack into a given spatial
volume, the higher efficiency and radiation resistance is.

He doesn't know light bulbs and electric heaters use his theory for
increased radiation resistance....of course it's mostly in the form of
thermal radiation.

73 Tom

1489. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:48:39 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39B8FC91.569B3855@bellatlantic.net>
Source record: 181305

And, get this, they are now marketing "an oscillator that
possibly counteracts the effects on the human body of
cell phone radiation". What I just put in quotes is a
paraphrase of part of an ad I heard on the radio for the
first time yesterday. WFAN carried the ad. I wish I
had the details. Snake oil lives!

Tom W8JI wrote:

> On Sun, 03 Sep 2000 20:26:30 -0700, Will <wcwhite@mindspring.com>
> wrote:
>
> >No, I wasn't basing my concern on that fraud, but it brings up another,
> >more general issue. It is fallacious to conclude or assume that a
>
> After 20 years or more of constant looking, I would have thought
> someone would have found a correlation Will.
>
> What I'm pointing out is the people running around claiming there is a
> correlation between non-ionizing radiation and cellular damage are
> blowing smoke. The only correlation has been related to heat damage,
> and that takes one hell of an RF field! I wouldn't violate the FCC
> guidelines here unless I was running more than 40 kW into a 10 dB gain
> antenna on 10 meter RTTY.
>
> It's to Chip's advantage to promote hysteria, because by being
> different and contaversial he gets attention. Normal people shouldn't
> exagerate the problem, becuase it is bad for all of us to "make up"
> things that just are facts.

1490. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 14:51:36 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B8FCF8.C4086002@bigfoot.com>
Source record: 181306

"Ed Hare, W1RFI" wrote:
> I rounded 19.42 dB up to 20 dB for the purposes of discussion.

Ed, Don't you mean "19.24 dB"? :-)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1491. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:04:55 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39b8ff76.172554021@news.azstarnet.com>
Source record: 181308

On Fri, 8 Sep 2000 10:42:48 +0100, "Reg Edwards" <g4fgq.regp@btinternet.com>
wrote:

>Tom you are quite correct. It is impossible for cable
>impedance Zo to behave is such a weird manner.
>
>Explanation - the measuring instrument or measurement
>method was grossely in error.

Well he did say:

>"P.S. My AEA CIA was better at getting actual numbers than the very
>expensive piece of instrumentation. This is a neat time to work with
>electronics and RF. Using my GR RF bridge is a pain."

If I may shamelessly quote from my ladder line article:

"Skilled amateurs, with rather simple instruments, are sometimes capable of
making astonishingly accurate measurements. More often however, the operator is
less aware of the equipment limitations and/or is misled by the instrument
maker's advertising. Simplified "antenna analyzers", especially those with
digital readouts can lull the user into unjustified confidence in the accuracy
of his measurements. "

Wes N7WS

1492. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:06:45 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39B90085.95F96E10@wb6hqk.ampr.org>
Source record: 181307

Reg Edwards wrote:

[description of how to model the transmission line common mode deleted]

> But if you are interested in the input impedance of the coax
> it will have to be measured or calculated separately.

EZNEC has the ability to model lossless transmission lines. The model treats transmission lines as lossless two port devices obeying the (lossless) transmission line equation for specified characteristic impedance and electrical length. Each of the two ports are placed in series with a wire segment.

Used in combination with the method for modeling the common mode behavior of the transmission line Reg described earlier in the thread, the transmission line model will provide realistic feedpoint impedances and field strengths for many practical amateur installations.

The hard part is determining how to model the ATU and station ground system. Link coupled ATU's (i.e.. Johnson Matchbox) are easily modeled as open circuits for the transmission line common mode. The more common unbalanced T tuners require knowing more about the station ground then is usually possible.

bart
wb6hqk

1493. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:15:44 UTC
From: k1bqt@aol.com
Message-ID: <20000908111544.15706.00000205@ng-cd1.aol.com>
Source record: 181309

>They ~suggest~ bandplans, but that's certainly not binding.<

Anyone ever try to violate one of these non-binding sanctuaries on-air when a self-appointed guardian was within the sound of your voice?

It's common knowledge some of the board's "suggestions" result from intense lobbying pressure from special interest groups (some incorporated like AMSAT and TAPR) in order to "annex" frequecies away from open access for exclusive use.

The League may have the largest "paid memebership", but it's numbers still represent a thundering minority of hams in possession of no regulatory power whatsoever. Didn't Manifest Destiny as a justification to annex territory die out after the mid 19th century, or is my history growing fuzzy?

--Rick

1494. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:35:08 UTC
From: dinod@deltanet.com
Message-ID: <MG7u5.136094$6y5.89554421@news2.rdc2.tx.home.com>
Source record: 181310

I actually did an article on thsi years ago....

The SO 239/PL 259 combo is good up to about 400MHz. It was originally
a military connector and became standard for Amateur Radio and CB.
This connecotr's impeadence CHANGES with frequency though!

All of you HF frequencies are unaffected (basically) from this
connector. This includes CB too. They are easy to install and work
well UNTIL you get to higher frequencies.

The N-Connector on the other hand has a CONSTANT IMPEDANCE up to the
Gigahertz range. You buy either a 50 ohm or 75 ohm connector. The
N-Connecotr also has a gasket to seal out water/moisture! It is clearly
a superior connector but is a little harder to install.

If I remember right, the UHF (SO 239/PL 259) connector can handle more
power (watts) but don't quote me on this.

The BNC is a "Bayonet N-Connector" and also has a CONSTANT IMPEDANCE
but lacks the seal.

I have converted most of my equipment to either BNC or N ancluding my
antennas. The better antenna companies offer N-connectors on their
HF antennas.

Yaesu and Kenwood produced radios that used N-Connectors for 440MHz and
above for a reason. Remeber the UHF connector is only good to 400MHZ and
does NOT garrantee a constant impedance! This causes a mis-match resulting
in higher SWR. Its like having a 75 ohm feedline hooked to a 50 ohm
feedpoint.

Now to answer your question...

You find quality connectors on quality cable. You buy the better cable for a
reason! Why ruin that with a substandard connector. Do it right the first
time. Besides, why would you want a higher SWR even befor you hook it to the
antenna due to cable/connector mis-match.

Most HF stations do NOT run Heliax. You find these on long runs and VHF and
above. Especially repeaters where you want a CONSTANT IMPEDANCE in your
feedline and antenna.

For HF, regular coax and a UHF connector is fine.

Dino...K6RIX

>Ok, then I'm curious...
>Why is it that UHF connectors are not standard on real thick cables like

>Andrews 1/2" and up? I see that N type is standard when using heliax and
>thicker cables up to a point.

1495. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:37:58 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8pb0vk$f7v$1@news2.bit-net.com>
Source record: 181312

"Fractenna" <fractenna@aol.com> wrote in message
news:20000908080416.20258.00000159@ng-da1.aol.com...
> Well Steve,
>
> READ my info carefully. I said that your design does not work as you
describe.

You did not see the design, the NEC file or the NEC results, so how would
you know?

>
> It is impossible to get a high radiation resistance at the current max
without
> duplicate current max's. See what happens to yours. Then notice how much
wire
> you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2
> waves of wire.
>

Actually Chip, the non-fractal design that I ran on NEC has a total wire
length of about 1.51 wavelengths, not the 5 - 6 wavelengths that you claim
without even seeing the design or the model. As I stated previously, it is
my technical opinion that the lowering of the resonant frequency is more a
function of the total wire length than the Fractal shape. Note that my
non-fractal design and the MI2 have similar total wire lengths.

> That's all I will say: I graciously offered to look at the file and give
you
> feedback--AS ANY PROFESSIONALY WOULD DO TO ANOTHER. Because you are being
> abusive, I will not do so now, as I feel that you, as president of
Cushcraft,
> are not acting as a professional but as a competitor.
>

I was not trying to be abusive at all. You started a very public technical
discussion on a Fractal antenna design. You then publicly asked everyone on
the NG to see if they could come up with a design offering similar
performance. You even offered to pay people $1000 if they were successful
in their efforts. You may not realize this but doing so as a representative
of Fractal Antenna Systems, you have created a legally binding contract that
your company must honor. You should also review your e-mails and note that
you asked me personally to use my Ph.D and experience to take the "Fractal
Challenge".

Being personally interested in the claimed performance of Fractal antennas
for some time, I decided to run a quick non-fractal design on NEC (on my own

personal time). I summarized the results of my NEC model and your response was that I made a mistake in my calculations. I still believe that your off the cuff response was presumptuous and arrogant, considering that you did not see the design.

As far as Cushcraft is concerned, this is not a competitive issue at all. In my NG posts, I did not mention my affiliation with Cushcraft. It was you who brought up the subject of my Cushcraft affiliation. I did not present my design as a representative of Cushcraft Corporation. I presented it as Steve Best in response to your direct personal request of me. Cushcraft Corporation has no intension of manufacturing or selling my design. I have not and will not publicly compare the performance of your products against any of the Cushcraft products. In fact, in my posts to the NG, I explicitly stated that I do not doubt the claimed performance of the MI2 antenna.

Personally, I would prefer that you not mention my Cushcraft affiliation again.

>
> I will honor your submission under the rules should you have something to
> submit, but further keep in mind that if we are to entertain the
possibility
> that you DO have a 'winning entry' then what kind of person are you for
> libeling someone about to give you $1000?
>

The statements made in my posts to the NG were not "libeling". Technical professionals have differing technical opinions all the time. If you publish a technical opinion in the open literature or in a public forum, you will find that other technical professionals may disagree with you and in fact may consider your technical opinions to be incorrect, invalid and just plain wrong. Another person stating that they disagree with you or that they believe you to be wrong is not libelous behavior. It's part of the risk you take when publishing data and stating technical opinions based on that data. I did not call you a liar, I did not say that you falsified technical data, I did not say that your designs do not work as claimed. I simply disagree with some of your technical opinions regarding the claim that any enhancements in antenna performance are solely a result of the Fractal geometry. No US laws preclude me from having this technical opinion nor do they prevent me from stating it.

Actually Chip, your statement: "I said that your design does not work as you describe" is more libelous than any of the statements I made.

>
> So basically the answer is that I do not consider you a colleague, or one
> evincing professional behavior and will not honor your request, should it
come
> from the proper channel.
>
> Next time, before you close doors, find out the size of the building.
>

> Chip N1IR

I stated some technical opinions and stated the results of a NEC model. You responded by claiming that my opinions were incorrect, speculative and that my analysis must have been a mistake and that my design could not work as I claim. You're the person burning the bridges with everyone you come in contact with. I guess you just added me to your list.

I would prefer to keep further conversations focused on the technical issue, so I hope we can cease with this foolishness. Also, please do not mention Cushcraft again.

73,
Steve VE9SRB

1496. Re: Bandwidth - 3 el 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:40:23 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39B8FB5A.6A5DBF1F@GTE.net>
Source record: 181311

ehsjr@bellatlantic.net wrote:

> What bandwidth should one expect to get with a
> 3 element yagi for 6 meters, using 7/8 tubing for
> the elements and 44" spacing between, and using
> 1.7 to 1 as the SWR bandwith. Gamma match.
> I'm getting very close to 1 MHZ, but I'm not
> pleased with my mechanical design and will be
> re-working things. I really hoped for the 2 mhz
> another ham thought I could obtain, but I feel that
> is unrealistic.

The BW you have is probably typical, although you did not say whether
this was measured at the antenna or in the shack. . But perhaps you
should be more concerned with what the gain and F/B are doing over the
BW you desire. VSWR is not a very good indicator of antenna performance.

1497. PhD COHEN N1IR FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:44:16 UTC
From: "A. Melon" <juicy@melontraffickers.com>
Message-ID: <6f9daded5ad51e800c884ea0f609d56c@melontraffickers.com>
Source record: 181313

N1IR Cohen you are just plain thief you call Russian Inventor Basil Vladimirovich Beserov mad Siberian scientist at least he was SCIENTIST and not mad at all and not THEIF like YOU. Let world see that all you are is BS Ph.D. THIEF and that if not for stupid fool Misha who tell you in 1993 about Siberian Fractal Antennas you still be playing with pig tail spirals.
Now world see that you are not abel to explain HOW fractal antenna work you just make smoke and call others stupid and try to fool world that you know how it works and that you INVENT.
You invent nothing you only STEAL.

Boris

Tell Misha remember Leningrad Radio Institute
I know TRUTH

1498. Re: PL-259 SO-239 connectors, versus 'N'type.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:46:17 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39B8FCBA.E900EACB@GTE.net>
Source record: 181314

Dino wrote:
The BNC is a "Bayonet N-Connector" and also has a CONSTANT IMPEDANCE

>
>

The bayonet part is right for the B, but the NC stands for the developers from
Bell Labs= Neill and Concelman

Dale W4OP

1499. Re: Line radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:48:22 UTC
From: k1bqt@aol.com
Message-ID: <20000908114822.15706.00000208@ng-cd1.aol.com>
Source record: 181315

Hi Jim-

A folded dipole is a balanced antenna normally either fed with balanced feedline of the same impedance, or fed with coaxial cable through a 4:1 impedance transformer (which may also function as a balun).

A regular wire dipole is also a balanced antenna, but has a lower feedpoint impedance that allows it to be fed directly with coax. Coax cable is unbalanced and the outer part of the shield becomes a "third leg" of the antenna when a balun is not used to prevent this condition from happenning. How much energy the "third leg" steals from the rest of the antenna and radiates depends on a number of factors, but its length is usually a major determinant.

Many people, and even the ARRL, feel the importance of using a coax-fed balun on a dipole is grossly over-rated. Many also feel the use of automobile seatbelts and motorcyle helmets are over-rated, as well (until they split open their head, anyway).

You might get by forever without a balun. Or, you might find you can't do E-mail and transmit at the same time without getting knocked offline. You might find your transmitter gets into the phone--or sets off the security alarm. You might find you can't use the speech processor without getting RF feedback on your audio. You might even get a little "tingle" from RF on a particular band when you key-down on CW. So, if you're a curious guy, don't use a balun--who knows what you might find? However, if you don't mind being bored, and if you advocate using good engineering practices when setting up your station, by all means--use one!

73

Rick K1BQT

1500. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 15:57:35 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39B90CB8.8162A866@bellatlantic.net>
Source record: 181316

This is a problem with statistical studies, in general:
people assume, when a statistical anomaly exists,
that there must be a correlation to something, even
if they cannot determine what that something is.
Why does a study show that there is a greater
percentage of leukemia in group A vs group B?
Because (assuming it is accurate) there are more
leukemia cases per unit population in group A
than in group B - the statistics are correct. But
then the error occurs, based on the assumption
that there is something common to group A that
is not common to group B. So we go merrily
off looking for the causative common denominator,
and don't question the initial assumption that there
IS a causative common denominator. That assumption
is reinforced by the statistics that show a common
denominator on the results side.

In the leukemia study of California hams, we assume
there might be a correlation to RF and investigate
that. Or we assume there might be a correlation to
employment in the electronics industry and
investigate that. Or a correlation to agricultural
chemicals and investigate that. And so forth -
that's the nature of statistical studies. They start
out with assumptions that some correlation exists.
And, clearly, in some cases statistical studies are
right. That lends more weight to the assumption
that a correlation must exist. And of course, there
is a further assumption that whenever a correlation
does exist, it can be revealed by a statistical study.

Where does that lead us? Well, perhaps to a bad
place. Take the commonly accepted idea that
exposure to too much sunlight leads to skin cancer.
Statistics seem to bear this out, from what I've
read. For the sake of this discussion, let's assume
that it is true. Ok, why is it that some people who
are exposed to far more sunlight don't suffer
skin cancer than those exposed to less sunlight do?
Well, we still say exposure to sunlight is *a* factor.
Then we (statistically) discover some other factors -
exposure to certain chemicals, heredity, diet, etc.
We now have a range of answers to the question,
instead of a blank slate with NO answers. How

many researchers are now more interested in
investigating something else because we have
those answers? And, does the fact that they
investigate something other than the cause of
skin cancer lengthen the amount of time it
will take us to determine the REAL underlying
cause, if one does exist? Suppose, as some
believe, there is a virus as the underlying cause.
If the virus were detected and treated or if there
were a vaccination against it, no amount of exposure
to sunlight or chemicals, or inherited defect or
whatever would cause skin cancetr, according to this
belief.

Don't get me wrong - I'm not claiming to know
any answers on the exposure to RF being damaging
or on the validity of the statistics involved. I am
only trying to point out that statistical studies
are based on assumptions at the very core of the
process - and that the results of those studies
can possibly be not only incorrect, but counterproductive.

"Ed Hare, W1RFI" wrote:

> K1BQT <k1bqt@aol.com> wrote:
>
> > One classic misuse of the Texas Target sample occurred when a type of
> cancer
> > was linked to power line EMR because a study found a cluster of cancer
> victims
> > residing near a large power line. They concluded (questionably) that EMR
> had
> > to be the cause.
>
> There are two types of factors that come into play. First, it is sometimes
> difficult to separate various epidimiological factors. The power line may
> run through the industrial area of town, or through old farmland, both of
> which may carry health risks from smoke or pesticides. What type of
> chemicals were sprayed under the lines to keep weeds under control?
>
> In the study done of California hams, a very slight statistical risk was
> shown for two rare forms of leukemia. RF? Or perhaps the years of
> breathing solder fumes, cleaning chemicals, etc, by the percentage of hams
> employed in the electronics industry that is greater than the average
> population. And in that study, btw, though the slight statistical
> significance was shown, it has never been brought out that the average age
> of death of the hams was several years higher than the average life
> expectancy? RF, or general affluence and/or factors such that hams tend to
> be licensed at an age >childhood, so any infant mortality is already
> factored out.
>

> 73,
> Ed Hare, W1RFI

1501. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:02:23 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39B90D8F.EA92E05D@wb6hqk.ampr.org>
Source record: 181317

"J. Mc Laughlin" wrote:
>
> Dear Roy and group:
>
> Earlier this week I was helping a colleague set up laboratory jobs to
> help
> EE students visualize and use transmission lines.

What level are the students?

> Happened to have an
> OLD piece of RG11 some 25 meters long. The lower frequency limit of
> the instrumentation is 4 MHz. It was fascinating to see how the line
> parameters of the old piece (lossy) of coax change with frequency.

How were you measuring the line parameters? I assume you were measuring input impedance; was the far end opened, shorted or terminated with a 75 ohm load?

> At
> "low" frequency the surge impedance (Z0) was about 75 ohms, which, as
> the frequency was raised, proceeded to spiral around the 50 ohm center
> of the Smith chart.

Sounds like the transmission line had one or more impedance bumps resulting from mechanical damage or corrosion. A good lab project for EE students is to take the input impedance (S11) data and use it to quantify and locate the transmission line fault. The procedure goes something like:

1) Collect a vector of suitably spaced input impedance measurements.
2) Convert measurements to reflection coefficients normalized to nominal line impedance (assumed or determined from data).
3) Transform into the time domain using the discrete Fourier transform.
4) Determine velocity factor by locating reflection from far end.
5) Determine the fault location and reflection coefficient.

The experiment can be compared to direct time domain measurements using a pulse source and oscilloscope.

> Yes, surge impedance can become reactive.

How did you derive the surge impedance from the data? The surge impedance is complex (Zo = sqrt((R+jwl) / (G+jwC)) of course, but tricky to estimate accurately from input impedance measurements. The technique described above only works well if the transmission line has low distortion (R/jwl approximately equal to G/jwC) over the frequency

range in question.

bart
wb6hqk

1502. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:10:37 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39B90F7D.F0FDCFD0@hiwaay.net>
Source record: 181371

Well said, Sir- indeed, a prime example.
Bill

W4JLE wrote:
>
> Is this the same Chip that has responded to others experience as "anecdotal"
> and that only the scientific method means anything?
>
> How dare you to presume that a PhD in listening to noise from the cosmos
> approaches Steve's qualifications in antennas. You are one supercilious
> bastard!
>
> --
>
> Fred W4JLE
> http://w4jle.com/
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000908080416.20258.00000159@ng-da1.aol.com...
> > Well Steve,
> >
> > READ my info carefully. I said that your design does not work as you
> describe.
> > This is from my EXPERIENCE--

1503. Re: PhD COHEN N1IR FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:15:25 UTC
From: fractenna@aol.com
Message-ID: <20000908121525.11003.00000587@ng-ch1.aol.com>
Source record: 181318

>N1IR Cohen you are just plain thief you call Russian Inventor Basil
>Vladimirovich Beserov
>mad Siberian scientist at least he was SCIENTIST and not mad at all and not
>THEIF like YOU.
>Let world see that all you are is BS Ph.D. THIEF and that if not for stupid
>fool Misha who tell you in 1993 about Siberian Fractal Antennas you still be
>playing with pig tail spirals.
>Now world see that you are not abel to explain HOW fractal antenna work you
>just make smoke and call others stupid and try to fool world that you know
>how it works and that you INVENT.
>You invent nothing you only STEAL.
>
>Boris
>
>Tell Misha remember Leningrad Radio Institute
>I know TRUTH
>

Fearless Leader! I no nothing Misha until meet in 1997. Nice guysky! He not know about fractal antennas until I explain.

You been in Lower Slobovia too long comrade?

As I tell Fearless Leader, I inspired fractal antennas from Mooze and Skayrul.

Bull the Winkle nice pair fractal tree antlerskies! Ask darlink' Natassha for confirm!

You more than badanov! Stop make loud noises!

NC

1504. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:30:16 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Yv8u5.588$u95.1536798@news.ntplx.net>
Source record: 181369

CAM <cam2338@bigfoot.com> wrote in message
news:39B8FCF8.C4086002@bigfoot.com...

> "Ed Hare, W1RFI" wrote:

> > I rounded 19.42 dB up to 20 dB for the purposes of discussion.

> Ed, Don't you mean "19.24 dB"? :-)

Yes, mea cupla. Musta' been dyslexia when I looked at the result of the
calculation on the screen.

73,
Ed, W1RFI

1505. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:36:49 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7C8u5.589$u95.1537302@news.ntplx.net>
Source record: 181370

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:

> BTW, it is late, so if I got any of the URLs wrong, give me what-for
> tomorrow and I will post a correction. I will clean out that ~ehare/temp
> area in a few days, so if they are gone, it is too late. Now, at 11:29,
it
> is time to really go home. GN, all.

Welp, I did it. The correct URL for the comparison is:

http://www.arrl.org/~ehare/temp/compare.jpg

Sorry about that.

73,
Ed, W1RFI

in message news:U4Zt5.584$u95.1502099@news.ntplx.net...
> Roy Lewallen <w7el@eznec.com> wrote:
>
> > I'm not convinced Tom's soil is poor from a conductivity point of view.
> > Hm, an idea. In your spare time, Tom, if you have the measurement
> > equipment, you might run a radial measurement or two and determine the
> > apparent conductivity like the broadcasters do. 160 is close enough to
> > the AM BC band so the measurements should be reasonably valid.
>
> I wasn't convinced either, but when I ran the model over very good ground,
> all I saw was an improvement in the lowest angle performance, and a very
> slight decrease at the higher angles, just what I would have expected,
with
> a slight increase in maximum gain at the lower angles.
>
> > Maybe the disparity between Ed's models and Tom's observations is
> > evidence that the arrival angle is lower, perhaps much lower, than the
> > fairly high angle quoted by Ed. Does anyone know of any decent study or
> > studies that actually determined "typical" arrival angles for really
> > long-haul DX on or near 160 meters?
>
> Tom's results indicated that the vertical was better for even moderately
> close signals, if I recall what he said. If the vertical was over very
good
> ground, I would expect to see that improvement only for signals arriving
> below 20 degrees.
>
> I know of no studies, although I recall seeing a table published
somewhere.

> To obtain such info, I usually use the absolutely incredible
> "IONCAP/WINDOWS" based program available as freeware at:
>
> http://elbert.its.bldrdoc.gov/pc_hf/hfwin32.html
>
> It is, btw, a 5 Mb file, so the download can be pretty slow. This version
> does NOT run on Windows 3.x; there are 16-bit verisons on the site.
> (/hfwin16.html?)
>
> I just ran the ICEPAK program in the suite and after I entered a minimum
> angle of 5 degrees (seemed reasonable to me), it predicted the following
> angles:
>
> http://www.arrl.org/~ehare/temp/angles.jpg
>
> The SNR is shown at:
>
> http://www.arrl.org/~ehare/temp/snr.jpg
>
> Note that the angles are only good while the SNR is reasonable. SNR looks
a
> bit low to me, but I did select residential noise instead of rural quiet.
>
> In case anyone would like a brief glimpse of the user interface for
ICEPAK,
> see:
>
> http://www.arrl.org/~ehare/temp/icepak.jpg
>
>
> > Ed, at what elevation angle are the vertical and dipole about equal, say
> > over very good ground?
>
> Oh, you had to ask, after I didn't save my working files. Okay, I will do
it
> again. The results of the two antennas over very good ground are shown
at:
>
> http://www.arrl.org/~ehare/temp.compare.jpg
>
> I can't explain Tom's results through modeling, but he is a capable and
> qualified ham who has put a lot of effort into his testing. OTOH, the
> results I am getting appear to be consistent with what I would expect from
> theory for verticals and horizontal dipoles. I did not do my dipole model
> "droopy," but I don't expect that would make a lot of difference. I also
> tossed the tower into the model, but saw no real difference. Now, I
didn't
> take much pains to get the model exact, and didn't do any convergence, but
> for the number of segments, I think I was okay. I wonder if there are any
> other antennas nearby that are affecting the dipole more than the

vertical,
> because the models say that the dipole should outperform the vertical
almost
> all the time, sometimes by quite a bit.
>
> Tom, is the SWR bandwidth of the dipole about what you would expect to
see?
> Could there be some feed-line losses that could explain the differences?
I
> sure hate it when models don't agree with someone's reality; I rely on
> models a lot. :-)
>
> BTW, it is late, so if I got any of the URLs wrong, give me what-for
> tomorrow and I will post a correction. I will clean out that ~ehare/temp
> area in a few days, so if they are gone, it is too late. Now, at 11:29,
it
> is time to really go home. GN, all.
>
> 73,
> Ed Hare, W1RFI
>
>
>

1506. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 16:59:03 UTC
From: richardharrison@webtv.net
Message-ID: <22706-39B91AD7-10@storefull-115.iap.bryant.webtv.net>
Source record: 181372

Rick, K1BQT wrote:
"Anyone ever tried to violate one of these non-binding sanctuaries on-air when a self-appointed guardian was within the sound of your voice?"

People need to understand that we are a nation of laws. This means that any rule must be written and published by the proper authority to be valid. Nothing else matters and we wouldn`t want it ahy other way. Imagine: "It`s a rule just because I say so!"

I`ve heard the misguided nonsense about "gentlemens` agreements", unofficial plans, and all the other garbage. ARRL has been a perpetrator of a lot of this trash.

Best regards, Richard Harrison, KB5WZI

1507. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:16:06 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39B91ED6.2E975FB5@attglobal.net>
Source record: 181373

How would grounding issues or some question on the RG 58A/U come into play?

TNX
Wayne

Martin Meserve wrote:

> Wayne Grauel wrote:
> >
> > OK Folks... here it goes. I have a 96 Suburban that I want to
> > mount an antenna for 10 meters (without drilling holes in my
> > vehicle). I currently made a mount from steel that comes out
> > from under the rear bumper/drivers side (so doors will open).
> > This antenna was a ham fest acquisition and the notation said
> > it was very broad banded for 10 & 11 meters. it's shiny, has
> > two big coils (like springs, not wound coils) and is about 5
> > feet tall or so and aparently isn't worth a hoot!. I have no
> > directions. When mounted it sticks up past the roof about 1.5
> > maybe 2 feet. I took my TS440SAT out and placed it on the fron
> > seat (coax is in the vehicle, not running outside).
> > SWR's were through the roof. The vehicle was sitting beside
> > the house in the driveway.
> >
> > I have a hunch this is a glorified CB antenna. The AT would
> > tune it but not above 29 MHZ. I'd kinda like to have an
> > antenna that will tune to a reasonable SWR so I can use my
> > little IC706 (no tuner) .
> >
> > Well everyone, did I give you enough info to point me in
> > the right direction, do I start cutting wire off the
> > antenna (whip is adjustable), or do I shit-can it and
> > find a ham stick. It is adjustable to about 4 inches before
> > it bottoms out.
> >
> > Inclusion.... here's a thought, does anyone think that by
> > removing one of the sets of "springs" this would place it
> > in the 10 meter band???? I'm assuming a 10 meter antenna
> > will be shorter than an 11 meter antenna...no?
> >
> > Back to original post....
> >
> > I'm just not sure which way to go or what is the culprit.
> >
> > I'd really like to stay with a bumber mount of some kind
> > and not have some huge mast on top of the roof, etc.

> >
> > TNX
> > Wayne
> > N3TNS
>
> Well, what you have is probably a CB antenna, but there is nothing
> wrong with using it on 10 Meters. 11 Meters is close enough
> to 10 so that most any CB antenna can be adjusted to work well.
> I have one on my house and on my car.
>
> The one on my house is effectively a vertical dipole that's
> up about 25 feet. It does an excellent job.
>
> The one I use on my car is a little 3 foot whip with a
> loading coil in the magnetic mount base. I purchased it at
> Radio Shack. Using my HTX-100, and the antenna on the back
> of my 1989 Firebird, I have no trouble talking to the mid-west
> or the east-coast, from Phoenix. I even did some testing at
> the 5 Watt level with some stations in Virginia, while I was
> driving home from work. I was a little low on the S-Meter,
> but there was still solid copy.
>
> The two big shiny coils, on your antenna, are just springs.
> If you bend them over you should find a ground strap inside
> shorting out the whole thing. If that strap isn't there, or
> the strap breaks, that spring can cause lots of hash and
> noise. If you keep them, make sure the ground strap is good.
>
> But before you throw the whole thing away, I would suggest
> borrowing a Antenna Analyzer from a friend (something like a
> MFJ 259) and find out what the antenna is actually set up for.
> It may be quite usable with just a little tune up. However,
> don't expect the SWR to be flat from 27 to 30 MHz. Short
> whips are a little narrow banded so just optimize it for
> the area you need. Usually the only adjustment would be the
> length of the whip. The Antenna Analyzer will tell you very
> quickly whether the whip is to short, or to long, or just a
> piece of junk.
>
> Other posters have suggested that the optimum is a 108 Inch
> whip, and they are probably right. If you can't make your existing
> antenna work, it would be a good avenue to persue.
>
> Good Luck
>
> Martin K7MEM
>
> --
> Martin E. Meserve K7MEM martin.e.meserve
> Engineer, Program/Project Specialist AT

> Lockheed Martin M&DS - Reconnaissance Systems lmco.com
>
> I respond to news groups and E-Mail on my own time and therefore my
> responses may not be as timely as you, or I, would like them to be. If
> I seem to be ignoring you, send me another E-Mail to jog my memory.
> Opinions are my own and do not reflect the opinions of my employer.
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1508. Home Brew Antenna Parts Suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:30:12 UTC
From: Jeff Grey <cdma77@aol.com>
Message-ID: <39B92224.2D66@aol.com>
Source record: 181374

Hello All,

I am looking a antenna parts supplier for gamma matches for 2 meter & 70 cm. I am going to build a Oscar antenna like the Arrow, but with higher gain. Can anyone recomend a source. I don't want the hassle of trying to build my own gamma matches.

Thanks,

Jeff
N8EIP

1509. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:40:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B9247E.C6C9593C@eznec.com>
Source record: 181375

Balance isn't a function of the antenna as much as it is how it's fed. For example, a dipole fed with symmetrically-placed twinlead can easily be an unbalanced system. Just take one conductor of the twinlead and plug it into the center conductor of your rig's SO-239 output connector, and connect the other to the rig's chassis. This will produce unbalanced (common mode) currents in the two feedline conductors and in the two halves of the dipole. You can simulate this with EZNEC by modeling the dipole and feedline (which has to be modeled as two wires, not a transmission line model), putting a source across the feedline at the bottom, and then running a wire from one of the feedline conductors to ground. This added wire represents the path to ground from the rig's chassis.

Another way to create unbalanced currents in a twinlead-fed dipole is to place the feedline non-symmetrically with respect to the antenna. If you do this with EZNEC (again using two wires for the feedline), you'll find common mode current on the feedline and unbalanced currents in the antenna halves, just as you do in a real antenna.

Placing the source across the feedline at its input end, and no other connections at that point, simulates a feedline fed with a perfect balun or a truly balanced system such as a link coupled tuner. It's an appropriate model only if this is what you're trying to simulate. If you have this kind of system, and if your feedline is placed symmetrically with respect to the antenna, the currents on the antenna halves will be balanced and there won't be common mode feedline current. And the EZNEC model will show this.

And, of course, you can simulate a coax cable, including the path along its outside, by using a combination of a transmission line model and a wire. The technique is described in the EZNEC manual.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > It's certainly
> > possible to model both imbalanced antenna and feedline currents with
> > these programs.
>
> Roy, Since all elements of a G5RV dipole antenna model are symetrically
> balanced, how can EZNEC possibly report imbalance? The argument is not
> whether EZNEC *can* handle imbalance. The argument is whether EZNEC
> can possibly generate imbalance in a perfectly balanced antenna system.
> --

> http://www.mindspring.com/~w6rca

1510. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:41:14 UTC
From: richardharrison@webtv.net
Message-ID: <20191-39B924BA-2@storefull-112.iap.bryant.webtv.net>
Source record: 181380

EHS Jr. wrote:
"Well, we still say exposure to sunlight is a factor."

I always wear a shirt, but my BCC appeared on my shoulder, not my ear of bad r-f burn history, or my nose which was always getting sunburnt.

Maybe the green frogs after a rain don`t really mean it rained green frogs.

Best regards, Richard Harrison, KB6WZI

1511. Re: 10-80m Multiband w/300ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:43:08 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pb8g0ajl1@iac5.navix.net>
Source record: 181382

See W6RCA's Web site. Cecil has the answer to your problems.

--

Fred W4JLE
http://w4jle.com/

"Snorky" <poofbutt@eudoramail.com> wrote in message
news:39b97b37.20986331@news.gte.net...
> Hi Guys!
>
> I have a good working 40m (~66 foot) flattop dipole at about 30' fed
> with 75 ohm CATV coax presently.
>
> What I would LIKE to do, is run about 135 feet of dipole, bending the
> ends down (90 degress) a bit in the trees that hold 'em, and feed it
> with 300 ohm coax and have it work decently on all bands 10-80m.
>
> My rig is a Kenwood TS530S, and it the internal tuning circuit can
> handle (match?) loads from 25-200 ohms. The rig's actual input antenna
> load can handle 50-75 ohms.
>
> I am thinking I will need a 4:1 balun to get the antenna load within
> range of my rig. (300 to 75 ohms) Does this sound correct?
>
> Does anyone know if the 530S can handle broad enough tuning to work
> with this type of multiband dipole?
>
> Also, is there a specific length of twinlead that would be
> best/optimal to use for best all around coverage?
>
> I have a 3 element tribander (A3) for 10-15-20, so basically the
> multiband dipole would be for listening on those bands, but
> 12-17-40-80 would also be for xmitting.
>
> Much thanks - Ed - KF6YKM - Southern California
>
> edparry@gte.net

1512. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:47:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B9262D.F0C6A0B3@eznec.com>
Source record: 181376

Arthur Unwin wrote:
>
> In my present set up I route the coax THRU the boom.
> Most books say' hang' the feed' which also has draw backs
> But if the feed lines can affect calculated patterns or
> antenna performance on the increasing used results of computor
> programing such as EZNEC, then maybe it is time for all to rethink
> or re-evaluate the implications of feed methods and construction
> Possibly some could share their thoughts.
> Appreciate the input Roy
> Regards
> Art Unwin KB9MZ

In most simulations I've done, feedline current doesn't have a major impact on the main antenna lobe. (A notable exception is VHF ground planes and J-poles, where a worst-case feedline current can drop the signal intensity at the horizon by a couple of dB.) However, it could certainly trash a beam or phased array's front/back ratio, since relatively little radiation is required to do that. This is especially true if you're shooting for very deep nulls.

In my opinion, there are other compelling reasons to use a balun, which have been articulated in this group and elsewhere. But whether the effect is worth the effort is strictly a judgement call, as a number of people have pointed out, and some choose to use one and some not.

Roy Lewallen, W7EL

1513. Re: Peter makes 'RATIONAL but less apt' grade

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:51:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B9270D.1D0CFFEA@eznec.com>
Source record: 181377

ehsjr@bellatlantic.net wrote:
>
> And, get this, they are now marketing "an oscillator that
> possibly counteracts the effects on the human body of
> cell phone radiation". What I just put in quotes is a
> paraphrase of part of an ad I heard on the radio for the
> first time yesterday. WFAN carried the ad. I wish I
> had the details. Snake oil lives!

The scary thing is that it could probably be patented.

Roy Lewallen, W7EL

1514. Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:55:50 UTC
From: "g0nmy@callnetuk_dot_com" <g0nmy@callnetuk_DOT_com>
Message-ID: <39b92b36@eeyore.callnetuk.com>
Source record: 181378

"FxBxIsnoop" <fxbxisnoop@aol.com> wrote in message
news:20000830223223.06354.00000699@ng-fx1.aol.com...
> We are a law enforcement agency with an antenna problem. I need
information
> from anybody who uses a 2.4 Ghz video transmitter/receiver system. The
system
> we have uses a small 1 watt transmitter with a vendor-supplied rubber duck
> antenna approximately 4 inches in length with an SMA connector. Due to
> concealment requirements it is not possible to use a directional antenna
on the
> transmitter. To overcome a dead spot I need a directional antenna for the
> receiver, which currently has a vendor-supplied rubber duck antenna
> approximately 4 inches in length with an SMA connector. Which directional
> antennas have you guys had the best results with in the 2.4 Ghz band? If
anyone
> has constructed a good homemade antenna, especially something along the
lines
> of a parabolic reflector I would be interested in seeing your
plan/schematic.
> The area where I need coverage is a couple hundred feet beyond where the
signal
> drops out. Thanks.

Well I would not consider 1W a small signal at 2.4GHz, however,
any form of parabolic dish could be used at this freq with a dipole mounted
at the focal point.
a dipole of around 3" could be used you would have to find the focal point
of the dish.
f = D^2/16c
so the focal point of the dish is equal to the Diameter of the dish squared
divided by 16 times the depth of the dish at the centre.
so a 1ft diameter dish with a depth of 2 inches at the centre would give
144/16x2 = 4.5 so the focal point would be 4.5"
remember that this is the focal POINT so you would have to bring your dipole
in towards the dish.
this would give you a fair amount of gain and if you fit a pre-amp would
really hot things up.

From what other comments have been made to your request some seem a little
negative, which does not supprise me with today's radio hams.
As far as I am concerned by increasing the sensitivity of the receive side
would not break any licence only if you increased the transmit side which
could cause interference to other band users.
However, I do not live in the U.S. so do not know your laws too well, but
using common sense I cannot see a problem with what you are asking.

And besides if it helps to catch criminals there that's great by me.
hope this helps a little.
cheers Mark
G0NMY

1515. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 17:59:04 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39B928E8.41C67EA6@my-deja.com>
Source record: 181221

Wayne Grauel wrote:
>
> How would grounding issues or some question on the RG 58A/U
> come into play?
>
> TNX
> Wayne
>

The car body is generally used a the counterpoise, or ground plane, for the antenna. The optimum place for the antenna would be in the middle of your roof. Mounting it on the rear bumper may make it a little directional. That's not a problem when you are traveling down a nice straight highway, but on winding country roads it could cause a lot of signal fading as your car turns.

You really want as much of the antenna in the clear as possible. A bumper mount tends to hide some of the whip.

With the antenna on my car, the rear mount didn't seem to cause a direction problem. As long as I was headed in the right general direction, the signal stayed solid.

I'm not to sure what you mean by "grounding issues". When I mounted my rig under my dash, I grounded the rig through the power cables only. The dashboards these days are all plastic. The antenna gets its ground through the coax to the rig. The magnetic antenna mounts are all plastic on the outside and don't actually make electrical contact with the body.

The RG-58 cable then just runs down under the carpet and out the rear hatch. The hatch just closes on the cable but doesn't seem to harm it. A better way would probably be to bring the wire out through a hole in the bottom of the trunk. But this way has worked for years.

Some people have a lot of problems with ignition or alternator noise, but my car seemed to be pretty clean. If you do have noise problem you may have to resort to hash filters or other fixes.

Martin

--
Martin E. Meserve K7MEM martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1516. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 18:00:36 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B92944.5159E5DB@bigfoot.com>
Source record: 181379

Roy Lewallen wrote:
> Balance isn't a function of the antenna as much as it is how it's fed.

Again, the question is not how bad an antenna design can be goofed up, it is: Does a G5RV *ALWAYS* have feedline radiation? I contend that a well designed, properly installed and fed G5RV has negligible feedline radiation and the model of such a well designed, properly installed and fed G5RV will show negligible feedline radiation. I contend it is a myth that part of the G5RV radiating elements have been folded back into the transmission line thus causing feedline radiation.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1517. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 18:22:53 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39B92E7D.CABB2711@hiwaay.net>
Source record: 181383

Steve- I told you earlier that you can't win in an exchange with Chip-

The problem is that you insist on applying rational and logical processes to an irrational and illogical person. In addition, you make the fundamental mistake of using the some definitions all the time, and, even worse, you use the ones found in the dictionary and published references.

Tsk-tsk- will you NEVER learn?

Bill-W4BSG

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000908080416.20258.00000159@ng-da1.aol.com...
> > Well Steve,
> >
> > READ my info carefully. I said that your design does not work as you
> describe.
>
> You did not see the design, the NEC file or the NEC results, so how would
> you know?
>
> >
> > It is impossible to get a high radiation resistance at the current max
> without
> > duplicate current max's. See what happens to yours. Then notice how much
> wire
> > you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2
> > waves of wire.
> >
>
> Actually Chip, the non-fractal design that I ran on NEC has a total wire
> length of about 1.51 wavelengths, not the 5 - 6 wavelengths that you claim
> without even seeing the design or the model. As I stated previously, it is
> my technical opinion that the lowering of the resonant frequency is more a
> function of the total wire length than the Fractal shape. Note that my
> non-fractal design and the MI2 have similar total wire lengths.
>
> > That's all I will say: I graciously offered to look at the file and give
> you
> > feedback--AS ANY PROFESSIONALY WOULD DO TO ANOTHER. Because you are being
> > abusive, I will not do so now, as I feel that you, as president of
> Cushcraft,

> > are not acting as a professional but as a competitor.
> >
>
> I was not trying to be abusive at all. You started a very public technical
> discussion on a Fractal antenna design. You then publicly asked everyone on
> the NG to see if they could come up with a design offering similar
> performance. You even offered to pay people $1000 if they were successful
> in their efforts. You may not realize this but doing so as a representative
> of Fractal Antenna Systems, you have created a legally binding contract that
> your company must honor. You should also review your e-mails and note that
> you asked me personally to use my Ph.D and experience to take the "Fractal
> Challenge".
>
> Being personally interested in the claimed performance of Fractal antennas
> for some time, I decided to run a quick non-fractal design on NEC (on my own
> personal time). I summarized the results of my NEC model and your response
> was that I made a mistake in my calculations. I still believe that your off
> the cuff response was presumptuous and arrogant, considering that you did
> not see the design.
>
> As far as Cushcraft is concerned, this is not a competitive issue at all.
> In my NG posts, I did not mention my affiliation with Cushcraft. It was you
> who brought up the subject of my Cushcraft affiliation. I did not present
> my design as a representative of Cushcraft Corporation. I presented it as
> Steve Best in response to your direct personal request of me. Cushcraft
> Corporation has no intension of manufacturing or selling my design. I have
> not and will not publicly compare the performance of your products against
> any of the Cushcraft products. In fact, in my posts to the NG, I explicitly
> stated that I do not doubt the claimed performance of the MI2 antenna.
>
> Personally, I would prefer that you not mention my Cushcraft affiliation
> again.
>
> >
> > I will honor your submission under the rules should you have something to
> > submit, but further keep in mind that if we are to entertain the
> possibility
> > that you DO have a 'winning entry' then what kind of person are you for
> > libeling someone about to give you $1000?
> >
>
> The statements made in my posts to the NG were not "libeling". Technical
> professionals have differing technical opinions all the time. If you
> publish a technical opinion in the open literature or in a public forum, you
> will find that other technical professionals may disagree with you and in
> fact may consider your technical opinions to be incorrect, invalid and just
> plain wrong. Another person stating that they disagree with you or that
> they believe you to be wrong is not libelous behavior. It's part of the
> risk you take when publishing data and stating technical opinions based on
> that data. I did not call you a liar, I did not say that you falsified

> technical data, I did not say that your designs do not work as claimed. I
> simply disagree with some of your technical opinions regarding the claim
> that any enhancements in antenna performance are solely a result of the
> Fractal geometry. No US laws preclude me from having this technical opinion
> nor do they prevent me from stating it.
>
> Actually Chip, your statement: "I said that your design does not work as
> you describe" is more libelous than any of the statements I made.
>
> >
> > So basically the answer is that I do not consider you a colleague, or one
> > evincing professional behavior and will not honor your request, should it
> come
> > from the proper channel.
> >
> > Next time, before you close doors, find out the size of the building.
> >
> > Chip N1IR
>
> I stated some technical opinions and stated the results of a NEC model. You
> responded by claiming that my opinions were incorrect, speculative and that
> my analysis must have been a mistake and that my design could not work as I
> claim. You're the person burning the bridges with everyone you come in
> contact with. I guess you just added me to your list.
>
> I would prefer to keep further conversations focused on the technical issue,
> so I hope we can cease with this foolishness. Also, please do not mention
> Cushcraft again.
>
> 73,
> Steve VE9SRB

1518. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 18:25:37 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39B92F21.F7D0CA65@hiwaay.net>
Source record: 181384

-- BAD me- make that "same definitions"

Bill Aycock wrote:
>
> Steve- I told you earlier that you can't win in an exchange with Chip-
>
In addition, you make
> the fundamental mistake of using the some definitions all the time,

1519. Ham Radio SwapPage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 18:46:24 UTC
From: Linda AD6LT ~ Danny KO6OY & George KN6LA <ko6oy@jetlink.net>
Message-ID: <39B93400.E0AED55F@jetlink.net>
Source record: 181238

KO6OY's Ham Radio Swap Page
Buy, Sell, Trades & Wants !!!
** All Personal Ham Radio Related Ads Are Posted FREE **
This is one of The Largest Ham Radio Swap Sites on The
Internet..
All ads are Posted Manually so we can weed out the
commercial & junk mail ads...

Click Here ------>
http://www.jetlink.net/~ko6oy/swapage4.htm

Stop By For a Visit,
Thanks For Reading....
73 Danny ko6oy & Linda ad6lt

1520. BS PhD COHEN N1IR FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 18:51:24 UTC
From: "A. Melon" <juicy@melontraffickers.com>
Message-ID: <d67dab89ad28a56019490aa9186b545b@melontraffickers.com>
Source record: 181381

N1IR Cohen you now prove that you LIE and are THEIF Misha was part of Radio Institute and 1993 you sent letter from you as radio amateur enthusiast and academic at Boston University to Radio Institute asking information on fractal antenna that Institute was building
we have letter.
Radio Amateur enthusiasts at Radio Institute sent you information we have letters.
We read all of your LIES that you publish and understand why you do not explain how fractal antenna works this is easy answer YOU DO NOT KNOW HOW CAN THEIF know what he not understand himself.
We understand why you insult everyone that asked for explanation you do not understand yourself.
We see that you try to make joke of this serious matter but you must know that your joke will only bite you.
Our English may not be perfect but our RECORDS are PERFECT CLEAR.

Boris
I know TRUTH

1521. Re: Needed UHF 477mHz Beam design

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 19:17:37 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <39B93C26.E805D32B@earthlink.net>
Source record: 181385

There is a bunch of 'em in the arrl antenna book for 440 just scale 'em
a little.
Dave

Damien D Keffyn wrote:
>
> Does anyone have a design diagram for a UHF 477mHz Beam design I have
> searched the net without any luck.
>
> Damien

1522. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 19:17:46 UTC
From: n4zou@my-deja.com
Message-ID: <8pbe03$dh0$1@nnrp1.deja.com>
Source record: 181387

In article <8759-39B8DC53-6@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Wayne GHrauel wrote:
> "Live and learn."
>
> Mobile whip springs are not loading coils. Inside should be an intact
> strap to short out the spring. Bend the spring over and have a look.
If
> the shunt is missing or broken the spring should be discarded.

The "springs" he is talking about are not at the base of the antenna
and do not have a strap across them to short them out. They are very
large inductors. The first one is about 2 feet from the base and the
second one is about 6 inches above the top of the first antenna. They
are used to load the 5 foot antenna for use on 11 meters.
>
> A 5-foot whip is too short to be a quarter-wave at 10 meters without a
> loading coil. It is near 1/4-wave at 6 meters.

Thats right and the reason for the very large inductors that look like
springs.
>
> 108 inches is 9 feet or about 2.74 meters or about 1/4-wave at 11
> meters. A whip this length may actually be too long in the 11-meter
> band. High voltage at the tip of the antenna actually increases its
> apparent capacitance. This effect depends on the length to diameter
> ratio of the wire, but the usual rule is to shorten a whip 5% for "end
> effects". This makes the 11-meter whip 102 inches long.

The Radio Shack whip is 102 inches long and with the heavy spring
added to the base makes it 108 inches long. As these antennas are
mounted to a bumper and some part of the whip is close to the metal
body, capacitance added to the system will require it to be just a
little longer than required. This also brings the match impedance up a
little more than the 37 ohms for a vertical mounted over a ground
plain. Also as the ground plain extends in only one direction at the
mounting point at the rear bumper this also tends to get the impedance
closer to 50 ohms.
>
> A 5-foot whip will need a loading coil to resonate at 10 meters. You
> could also consider a large capacitive hat to resonate the whip at a
> lower frequency. The hat doesn`t have so much resistance to lower the
> efficiency of the whip as a coil does. A combination of loading
methods
> can be used. You can check for resonance with whatever instruments you

> may come by.

The people that build this antenna have all kinds of stuff hang on it. None of it really improves the antenna but causes it to look impressive to people that know nothing about antenna's. They make a "beam antenna" that takes the place of the second inductor. It is really only a capatiance hat but there is about a 3 foot boom on it a 5 elements with a 6 radial capatiance hat on the back of the boom.

> When resonant at 1/4-wave, the impedance will not likely be too close to
> 50 ohms. A 1/4-wave vertical is 1/2 of a 1/2-wave dipole. The other half
> of the antenna is supplied by its image in the ground, car body, ground
> plane, or what have you. The dipole in space has 75 ohms impedance and
> 1/2 of that is about 37 ohms. the environment of the whip will shift its
> impedance also and it may well be less than 37 ohms. You may consider 37
> ohms close enough to 50 ohms and that`s just fine too.
>
> Some would prefer the convenience of a short loaded whip. Most CBers do.

That is another problem with this antenna. It must have the inductors mounted high and away from the car or truck body to keep the stray capacitance at a constant level. You really need to see one of these things to understand the problems this antenna has. You end up with the top of the antenna higher than a 102 inch whip mounted to the bumper.

> That`s why you see those little whips emerging from various sizes and
> shapes of coils. It isn`t as efficient as a full-sized whip but may be
> plenty good enough.
>
> Best regards, Richard Harrison, KB5WZI
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1523. Re: Sorry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 19:19:06 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <39B93C7E.994F3652@earthlink.net>
Source record: 181386

Don't Worry! (I sent it to all my friends!)
Dave

AMDX wrote:
>
> The posting was supposed to be an email.
>
> --
> Mike Knowlton
> Panama City Fl.

1524. Explaination of fractal electromagnetic finally appears!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 19:28:34 UTC
From: 2w8ji@contesting.com
Message-ID: <39b93b22.51814709@news.akorn.net>
Source record: 181388

On 08 Sep 2000 13:05:25 GMT, fractenna@aol.com (Fractenna) wrote:

Someone wrote in another thread:
>>The levels in various immunity standards are approximately 3 V/m. The levels
>>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>>correlate RFI and RFX issues with 20 dB of difference between the two.

To wit Dr. Cohen responds:
>
>10 dB between those two values...
>73
>Chip N1IR

This might be what we've been waiting for.

This, plus incoherent measurement techniques, could explain why
fractals have extra gain and why that data has been measured and
confirmed by Dr. Cohen.

73 Tom

1525. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:05:28 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8pbgl7$jh5$1@news2.bit-net.com>
Source record: 181390

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:39B92E7D.CABB2711@hiwaay.net...
> Steve- I told you earlier that you can't win in an exchange with Chip-
>
>
> Tsk-tsk- will you NEVER learn?
>
> Bill-W4BSG
>

Bill:

I know. After one more post today, I will stop with the banter back and forth. Back to checking in on the NG just once and awhile. Quite frankly, I don't know how Chip finds all the time to read and post so many messages. I do have one question though - sometimes he posts as Chip and sometimes as NC, PhD. Does Chip not have a PhD?

73's
Steve before, Steve now and always Steve (no one else)

1526. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:12:14 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8pbh1pjjd1@news2.bit-net.com>
Source record: 181391

"Fractenna" <fractenna@aol.com> wrote in message
news:20000908080416.20258.00000159@ng-da1.aol.com...

>
>
> READ my info carefully. I said that your design does not work as you
describe.
> This is from my EXPERIENCE--as I said-- with those spirals, which often
are
> the 'base' antenna I am ask to improve upon in RFID applications at
Fractal.
>
> I did not imply that you should take that personally, but as a motivation
to
> re-check what you did.
>
> It is impossible to get a high radiation resistance at the current max
without
> duplicate current max's. See what happens to yours. Then notice how much
wire
> you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2
> waves of wire.
>

In "re-checking" my design, I modified the parameters a bit to change the resonant frequency and resonant resistance. The model is comprised of 964 wire segments and was run on NEC4. Geometry was checked with GNEC (also running a NEC4 engine). Here is an overview of the results:

Resonant Frequency: 13.765 MHz

NEC4 Calculated Impedance: 40.87 + j0.82 ohms

2:1 SWR Bandwidth wrt 50 ohms (no matching): 1.73%

Antenna Maximum Physical Aperture: 0.122 wavelengths by 0.133 wavelengths

Total Wire Length in the Antenna: 1.564 wavelengths

I could trade off wire length, aperture size, resonant frequency, resonant resistance, bandwidth, etc but did not want to spend anymore time on this one.

BTW - This design occupied about 5 minutes of thought procees, not years of research. Suck it up and send the check. (Now that's abusive)

73,
Steve, VE9SRB

1527. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:25:33 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39B94B3D.448B99C@hiwaay.net>
Source record: 181394

Steve- the real number of posting persons using the name 'Fractenna' is not known. However, among the signatures you are referring to, the real person is Nathan L. Cohen, who has a Ph.D., and is licensed as N1IR. He signs as Chip, (apparently a long-standing nickname) when he is being buddy-buddy and palsy, as NC on many occasions when the situation is ambiguous, as Nathan Coven, Ph.D. when he is being stern with the peasants. He also uses that when he threatens lawsuits and other retribution for people who do not show him proper respect.

IN addition, there are other names used. One is Phil, for which there is apparently a real counterpart, used usually when the entity wants to be vulgar and insulting- Cohendog (really!) when ridiculousness is called for, but the sacred names are not to be used, and several others, invoked when he wants to pat himself on the back, or ask a question that no real person has asked, so he can pontificate. AOL lets subscribers use many names, at will.

TRying to keep up with it is futile- just read, and chuckle at the fantasies created by an especially puerile mind.

VE9SRB wrote:
>
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:39B92E7D.CABB2711@hiwaay.net...
> > Steve- I told you earlier that you can't win in an exchange with Chip-
> >
> >
> > Tsk-tsk- will you NEVER learn?
> >
> > Bill-W4BSG
> >
>
> Bill:
>
> I know. After one more post today, I will stop with the banter back and
> forth. Back to checking in on the NG just once and awhile. Quite frankly,
> I don't know how Chip finds all the time to read and post so many messages.
> I do have one question though - sometimes he posts as Chip and sometimes as
> NC, PhD. Does Chip not have a PhD?
>
> 73's
> Steve before, Steve now and always Steve (no one else)

1528. Re: Home Brew Antenna Parts Suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:28:57 UTC
From: arrow146@aol.com
Message-ID: <20000908162857.23348.00000272@ng-cb1.aol.com>
Source record: 181392

>Subject: Home Brew Antenna Parts Suppliers
>From: Jeff Grey cdma77@aol.com
>Date: Fri, Sep 8, 2000 11:30 AM
>Message-id: <39B92224.2D66@aol.com>
>
>Hello All,
>
>I am looking a antenna parts supplier for gamma matches for 2 meter & 70
>cm. I am going to build a Oscar antenna like the Arrow, but with higher
>gain. Can anyone recomend a source. I don't want the hassle of trying
>to build my own gamma matches.

Hello, Jeff N8EIP

Maybe I can help you with gamma match parts.

How do you plan on increasing the gain ? Longer boom? More elements?

Will you need a connector block ? How about a shorting bar?
You plan on using arrow shafts? What size?

73 Al Lowe N0IMW
<A HREF="http://members.aol.com/_ht_a/Arrow146/index.html">ArrowAntenna.com</A>

1529. Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:43:11 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8pbkq1$6nu$1@bob.news.rcn.net>
Source record: 181395

The following short quiz consists of 4 questions and tells whether you are qualified to be a "professional." Scroll down for each answer.

1. How do you put a giraffe into a refrigerator?

The correct answer is:

Open the refrigerator, put in the giraffe and close the door.

This question tests whether you tend to do simple things in an overly complicated way.

2. How do you put an elephant into a refrigerator?

Wrong Answer: Open the refrigerator, put in the elephant and close the refrigerator.

Correct Answer: Open the refrigerator, take out the giraffe, put in the elephant and close the door.

This tests your ability to think through the repercussions of your actions.

3. The Lion King is hosting an animal conference. All the animals attend

except one. Which animal does not attend?

Correct Answer: The Elephant. The Elephant is in the refrigerator.

This tests your memory.

OK, even if you did not answer the first three questions correctly, you still have one more chance to show your abilities.

4. There is a river you must cross. But it is inhabited by crocodiles. How
do you manage it?

Correct Answer: You swim across. All the crocodiles are attending the Animal Meeting.

This tests whether you learn quickly from your mistakes.

According to Andersen Consulting Worldwide, around 90% of the scientists they tested got all questions wrong. But many preschoolers got several correct answers.

1530. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 20:56:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B95294.AB7C73DF@eznec.com>
Source record: 181393

Please don't let this exchange with Chip deter you from the newsgroup. There really are some good, informative, and rational technical discussions that go on here from time to time. I and many others welcome another knowledgeable person. The only thing that's necessary to enjoy this newsgroup is to avoid attempting a technical discussion with Chip, for reasons you, I, and everyone else who's tried it have discovered. The more people like you who'll stay and contribute, the larger the proportion of solid technical discussion we'll have in relation to the mass of Chip-centered postings.

Roy Lewallen, W7EL

VE9SRB wrote:
>
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:39B92E7D.CABB2711@hiwaay.net...
> > Steve- I told you earlier that you can't win in an exchange with Chip-
> >
> >
> > Tsk-tsk- will you NEVER learn?
> >
> > Bill-W4BSG
> >
>
> Bill:
>
> I know. After one more post today, I will stop with the banter back and
> forth. Back to checking in on the NG just once and awhile. Quite frankly,
> I don't know how Chip finds all the time to read and post so many messages.
> I do have one question though - sometimes he posts as Chip and sometimes as
> NC, PhD. Does Chip not have a PhD?
>
> 73's
> Steve before, Steve now and always Steve (no one else)

1531. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 21:23:44 UTC
From: richardharrison@webtv.net
Message-ID: <8757-39B958E0-59@storefull-117.iap.bryant.webtv.net>
Source record: 181398

N4ZOU wrote:
"The people that build this antenna have all kinds of stuff hung on it."

It must be a Dusie!

Even so, sold as a CB antenna, it should resonate on the 11-meter band. If it adjusts as it should, it should work in the 10-meter band, with or without further adjustment, reasonably well. I`ve had good luck using 27 MHz antennas at 33 MHz. I sometimes did a little trimming.

I really appreciate the description of a very imaginative antenna. I don`t think the two coils give it "self similarity".

Best regards, Richard Harrison, KB5WZI

1532. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 21:27:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pblgi$7q7$1@uranium.btinternet.com>
Source record: 181396

Cecil, when Z-matching it shouldn't be forgotten the
feedline Zo is just as important as its length. To reproduce
your results it is necessary to obtain a feedline of the
same impedance as yours. I recall you mentioning your Zo is
not the 450 ohms it says on the label.

Good to see you back in action.

Reg.

1533. FA MFJ-259B/CARRYING CASE/MFJ-66 DIP METER COILS!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 21:43:47 UTC
From: chris fox ni4l <cfox007@bellsouth.net>
Message-ID: <39B95D93.460E82A6@bellsouth.net>
Source record: 181397
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=430523824
Please check out all my auctions thanks

1534. finally

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:03:44 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <8pbnqq$48e$1@nntp.ixcis.com>
Source record: 181400

found the ground state rotational energy for water vapor
you're are of course correct

22.235 GHz is where QM rears it's ugly head (spelled ugly right this time)
that's the water rotational absorption line
been decades since I measured it in freshman chemistry
Two full professors of physics in two different classes are wrong about 2.5
GHz ovens, as is their student.
turns out maple sugar is an even better absorber than water
even so, classical E&M breaks down at scales of 100A (10E-10 meter) and
photon frequencies of 22 GHz
H
WA5IGW

1535. Re: BS PhD COHEN N1IR FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:05:20 UTC
From: fractenna@aol.com
Message-ID: <20000908180520.10997.00000700@ng-ch1.aol.com>
Source record: 181399

>
>N1IR Cohen you now prove that you LIE and are THEIF Misha was part of Radio
>Institute
>and 1993 you sent letter from you as radio amateur enthusiast and academic at
>Boston
>University to Radio Institute asking information on fractal antenna that
>Institute was building
>we have letter.
>Radio Amateur enthusiasts at Radio Institute sent you information we have
>letters.
> We read all of your LIES that you publish and understand why you do not
>explain how fractal
>antenna works this is easy answer YOU DO NOT KNOW HOW CAN THEIF know what he
>not
> understand himself.
>We understand why you insult everyone that asked for explanation you do not
>understand yourself.
>We see that you try to make joke of this serious matter but you must know
>that your joke will only bite you.
>Our English may not be perfect but our RECORDS are PERFECT CLEAR.
>
>Boris
>I know TRUTH

Fearless Leader! Is conspiracy by Mooze and Skayrul! Especially mooze! Please to make Natassha put on websky the letters make mooze and skayrul know mother Slobovia home for the fractile antenna!

Please stop melons split and post letters on web sitesky!

Also please send mustache wax. Mooze use on fractal antlers! Get dirty! More than Badanov!

NC

1536. Re: finally

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:15:37 UTC
From: fractenna@aol.com
Message-ID: <20000908181537.10985.00000741@ng-ch1.aol.com>
Source record: 181401

>found the ground state rotational energy for water vapor
>you're are of course correct
>
>22.235 GHz is where QM rears it's ugly head (spelled ugly right this time)
>that's the water rotational absorption line
>been decades since I measured it in freshman chemistry
>Two full professors of physics in two different classes are wrong about 2.5
>GHz ovens, as is their student.
>turns out maple sugar is an even better absorber than water
>even so, classical E&M breaks down at scales of 100A (10E-10 meter) and
>photon frequencies of 22 GHz
>H
>WA5IGW

I already said this.

I also said that collisonal broadening makes such spectral lines absorb far
away from this frequency. Please check the relevant post.

73
Chip N1IR

1537. AAAAAAIIIIIIIIIIIIIEEEEEEEEEEE ....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:21:44 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Ewdu5.1488$Ek.4168@newsfeed.slurp.net>
Source record: 181402

The full moon approaches ....

1538. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:48:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B96CC3.E8DD0546@eznec.com>
Source record: 181403

If the G5RV is fed in a way that forces or allows only equal and opposite currents on the feedline conductors, then the feedline won't radiate. You're right in that there's nothing special about a G5RV which makes it more or less prone to radiate than any other symmetrical antenna like a dipole.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > Balance isn't a function of the antenna as much as it is how it's fed.
>
> Again, the question is not how bad an antenna design can be goofed up,
> it is: Does a G5RV *ALWAYS* have feedline radiation? I contend that a
> well designed, properly installed and fed G5RV has negligible feedline
> radiation and the model of such a well designed, properly installed and
> fed G5RV will show negligible feedline radiation. I contend it is a myth
> that part of the G5RV radiating elements have been folded back into the
> transmission line thus causing feedline radiation.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1539. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:50:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pbqdq$3g0$1@neptunium.btinternet.com>
Source record: 181405

Peter wrote -
> But many preschoolers got several correct answers.
==========

They were the monkeys.

Very funny !

In real life many excellent people fail exams because of
silly questions asked by examiners.

This is aggravated by examination-paper markers who don't
know the correct answers even if there are any.

Reg.

1540. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:53:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B96DD7.ACC06433@eznec.com>
Source record: 181404

Peter Bertini wrote:
>
> The following short quiz consists of 4 questions and tells whether you
> are qualified to be a "professional." Scroll down for each answer.

> . . .

> According to Andersen Consulting Worldwide, around 90% of the
> scientists they tested got all questions wrong. But many
> preschoolers got several correct answers.

From which the obvious conclusion is:

a) Preschoolers are more professional than scientists.
b) The test measures something other than professionalism.

Take your pick.

Roy Lewallen, W7EL

1541. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 22:58:56 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39B96F30.9677EB11@oio.net>
Source record: 181407

K1BQT wrote:
>
> >They ~suggest~ bandplans, but that's certainly not binding.<
>
> Anyone ever try to violate one of these non-binding sanctuaries on-air when a
> self-appointed guardian was within the sound of your voice?
>
----clipped----

As a matter of fact, yes. Bandplans change, and the 'old' plans
never seem to be officially 'rescended'. Therefore there are a bunch
of 'out of date' operators out there that just have fits when you
transmit in a so-called 'allocated' segment of a band. I just 'LOVE'
to correct their misunderstanding. Bandplans should be by current
usage, not by someone's ideas who probably hasn't listened to an
active amateur band in years.
'Doc

1542. Re: Home Brew Antenna Parts Suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 23:01:56 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39B96FE4.CB82121E@dialpoint.net>
Source record: 181410

Forget the gamma matches at those frequencies. Look at some of the K1FO designs that use a beta match. It is simple to make those and they seem to work beter especially on the 70 cm band. You might have some problems finding the small hardline for the 70 cm stuff, but it is worth it.

Jeff Grey wrote:
>
> Hello All,
>
> I am looking a antenna parts supplier for gamma matches for 2 meter & 70
> cm. I am going to build a Oscar antenna like the Arrow, but with higher
> gain. Can anyone recomend a source. I don't want the hassle of trying
> to build my own gamma matches.
>
> Thanks,
>
> Jeff
> N8EIP

1543. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 23:45:33 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <3Ueu5.595$u95.1561146@news.ntplx.net>
Source record: 181408

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:8pad4vevq1@slb1.atl.mindspring.net...

> I worked in downtown Atlanta for a number of years and my office window
> looked right out over the GA Tech campus at about the 40th floor level.

> I always wondered when I looked at the midtown AM antenna of WSB...

> WSB's AM clear channel MW tower is in midtown Atlanta. What are the EMI
> levels a few blocks away at several hundred feet above sidewalk level?

Hello, Peter,

I assume a few blocks away is 300 feet. I assume that several hundred feet above ground level is 400 feet. EZNEC estimates that a 5/8-wave vertical with 64 half-wave radials over good ground will create an E field of 13 V/m at that point. Somewhat above the 3 V/m typical of RFI problems, but xx dB below the uncontrolled limit of 614 V/m.

EZNEC predicts that the field with 50kW applied would be at 614 V/m 1.7 feet from the antenna at a point 400 feet above ground. The antenna is 614.7 feet high in the model.

73,
Ed Hare, W1RFI

1544. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-08 23:50:12 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <rYeu5.596$u95.1561275@news.ntplx.net>
Source record: 181409

Richard Harrison <richardharrison@webtv.net> wrote:

> "10 dB between those two values."

> That`s the trouble with using "field strength" to mean power per square
> meter and also volts per meter.

It must be habit for me to use the terms precisely; when I say field strength, I am talking about the electric or magnetic field. It would be quite incorrect to say a "field strength" of 1 milliwatt/square centimeter. So, in the far field, the electric and magnetic fields vary by 1/D while the power density varies as 1/D^2. Hams often say field strength when discussing power density, though, so some confusion is inevitable. (I sure did misuse the term before I had to learn more about it all to handle the RF exposure rules issue.) That is why I was careful to include the units as V/m, to help clarify why I used the 20 log (ratio) formula.

Sorry for any confusion.

73,
Ed Hare, W1RFI

1545. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:02:57 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <o8fu5.597$u95.1561937@news.ntplx.net>
Source record: 181411
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Peter, thanks; this one made my day. I will forward it to the VEC Question Pool Committee and see if they can use it in the Extra Pool. That ought to really keep the riffraff out of ham radio. :-)

I cross posted this to rec.radio.amateur.policy; it is time this group cross-posted them for a change! :-) Besides, this thread really isn't much related to antennas. But I am glad you posted it anyway!

73,
Ed Hare, W1RFI

Peter Bertini <commquart@erols.com> wrote in message news:8pbkq1$6nu$1@bob.news.rcn.net...
> The following short quiz consists of 4 questions and tells whether you
> are qualified to be a "professional." Scroll down for each answer.
>
> 1. How do you put a giraffe into a refrigerator?
>
>
>
>
>
> The correct answer is:
>
> Open the refrigerator, put in the giraffe and close the door.
>
> This question tests whether you tend to do simple things in an overly
> complicated way.
>
>
> 2. How do you put an elephant into a refrigerator?
>
>
>
>
>
> Wrong Answer: Open the refrigerator, put in the elephant and close the
> refrigerator.
>
>
> Correct Answer: Open the refrigerator, take out the giraffe, put in the
> elephant and close the door.
>
> This tests your ability to think through the repercussions of your

> actions.
>
>
>
> 3. The Lion King is hosting an animal conference. All the animals attend
>
> except one. Which animal does not attend?
>
>
>
>
>
> Correct Answer: The Elephant. The Elephant is in the refrigerator.
>
> This tests your memory.
>
>
>
> OK, even if you did not answer the first three questions correctly, you
> still have one more chance to show your abilities.
>
>
> 4. There is a river you must cross. But it is inhabited by crocodiles.
> How
> do you manage it?
>
>
>
>
>
> Correct Answer: You swim across. All the crocodiles are attending the
> Animal Meeting.
>
> This tests whether you learn quickly from your mistakes.
>
>
> According to Andersen Consulting Worldwide, around 90% of the
> scientists they tested got all questions wrong. But many
> preschoolers got several correct answers.
>
>
>
>

1546. Re: finally

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:07:13 UTC
From: 2w8ji@contesting.com
Message-ID: <39b97e39.68992652@news.akorn.net>
Source record: 181412

On 08 Sep 2000 22:15:37 GMT, fractenna@aol.com (Fractenna) wrote:

>I already said this.

You also said a 10:1 voltage ratio is 10 dB.

>I also said that collisonal broadening makes such spectral lines absorb far
>away from this frequency. Please check the relevant post.
>
>73
>Chip N1IR

It is always a goiod idea to verify anything anyone says, especially
if they have a record of incoherent statements.

73 Tom

1547. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:07:53 UTC
From: rclark@epicedge.com
Message-ID: <39bc7f01.16256014@news.seanet.com>
Source record: 181414

On Fri, 08 Sep 2000 23:58:49 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:

>
>
>Salut,
>
>I am a bit puzzled.
>I bought a refrigerator.
>When I open the door there is a light inside.
>Is it possible to tell if the lamp is really switched off
>when the door is closed ?
>
>Thanks for the answers and 73

Hi Gilbert,

Ask the elephant.

73's
Richard Clark, KB7QHC

1548. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:08:41 UTC
From: fractenna@aol.com
Message-ID: <20000908200841.01196.00000283@ng-cr1.aol.com>
Source record: 181413

>
>Richard Harrison <richardharrison@webtv.net> wrote:
>
>> "10 dB between those two values."
>
>> That`s the trouble with using "field strength" to mean power per square
>> meter and also volts per meter.
>
>It must be habit for me to use the terms precisely; when I say field
>strength, I am talking about the electric or magnetic field. It would be
>quite incorrect to say a "field strength" of 1 milliwatt/square centimeter.
>So, in the far field, the electric and magnetic fields vary by 1/D while the
>power density varies as 1/D^2. Hams often say field strength when
>discussing power density, though, so some confusion is inevitable. (I sure
>did misuse the term before I had to learn more about it all to handle the RF
>exposure rules issue.) That is why I was careful to include the units as
>V/m, to help clarify why I used the 20 log (ratio) formula.
>
>Sorry for any confusion.
>
>73,
>Ed Hare, W1RFI

I wasn't confused.Your units were not dimensionally correct. I made the point that an order of magnitude is 10 dB--not 20 db WITH THESE UNITS.

Now we have the usual imps trying to make me look like an idiot for it.

73
Chip N1IR

1549. Re: AAAAAAIIIIIIIIIIIIIIEEEEEEEEEEE ....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:11:17 UTC
From: fractenna@aol.com
Message-ID: <20000908201117.01196.00000284@ng-cr1.aol.com>
Source record: 181415

>The full moon approaches ....
>

That explains strange behavior of mooze and skayrul.

73
Chip N1IR

1550. Re: BS PhD COHEN N1IR FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:13:35 UTC
From: fractenna@aol.com
Message-ID: <20000908201335.01196.00000285@ng-cr1.aol.com>
Source record: 181416

>ï¿½ï¿½ï¿½ Ò»ï¿½ï¿½.: ï¿½ï¿½ï¿½ï¿½ï¿½Ï¢ï¿½ï¿½È¥ï¿½ï¿½à¶£ï¿½
>
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>
>My Rot 13 is not working anymore
>--
>Gilbert.

Please post no more mooze trail. Fearless Leader want skayrul. He badanov as
is!

73
Chip N1IR

1551. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:23:28 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8pc05k$6kb$1@bob.news.rcn.net>
Source record: 181417

Yes it is.

Hope this helps.

Peter

Gilbert Mouget <gilbert.mouget@waika9.com> wrote in message
news:MPG.14239ba558e8194f989736@news.free.fr...
>
>
> Salut,
>
> I am a bit puzzled.
> I bought a refrigerator.
> When I open the door there is a light inside.
> Is it possible to tell if the lamp is really switched off
> when the door is closed ?
>
> Thanks for the answers and 73
> --
> Gilbert.
>

1552. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:30:17 UTC
From: 2w8ji@contesting.com
Message-ID: <39b87a7a.2487560@news.akorn.net>
Source record: 181418

On Thu, 7 Sep 2000 23:29:30 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>The SNR is shown at:
>
>http://www.arrl.org/~ehare/temp/snr.jpg

I can make S N voltage measurements with pretty good accuracy if
needed, if I can con someone into giving me a carrier. I have accurate
modern selective volt meters that cover 160, and they are portable.
Someday when I'm smarter I'll build a loop and calibrate it, and then
I'll have a FSM without renting one.

Until then, all I can do is A-B tests. I don't know how many mV/m I
have, but I can measure a small change accurately. So I could do a
radial, and look at the slope of attenuation.

>Note that the angles are only good while the SNR is reasonable. SNR looks a
>bit low to me, but I did select residential noise instead of rural quiet.

I can measure noise, at 12 kHz, 3 kHz, or 100 Hz BW. But that isn't
the issue.

>I can't explain Tom's results through modeling, but he is a capable and
>qualified ham who has put a lot of effort into his testing. OTOH, the
>results I am getting appear to be consistent with what I would expect from
>theory for verticals and horizontal dipoles.

Another 160 op with access to a tall tower reports the same thing, as
I found out too late! On occasion there are reports of good-working
low dipoles, but they generally are not A-B tested against good
verticals.

The ringer for me was the ~.6 wl vertical. That thing pretty well
suppresses the high angle stuff, and still is great out 500 miles or
more. The dipole should be killer if the wave angle is 20-30 degrees
compared to that antenna.

BTW, I never say "dipole vertical", I always say 1-2 and randomly
switch around so 2 isn't always the same antenna. I also watch the
receiver, and know what the S meter means because I have a little
chart.

>for the number of segments, I think I was okay. I wonder if there are any
>other antennas nearby that are affecting the dipole more than the vertical,
>because the models say that the dipole should outperform the vertical almost
>all the time, sometimes by quite a bit.

At 300 feet or more high in the center, the dipole is reasonably clear. There is an 80 meter dipole at almost right angles, but it is 1/4 wl below the 160 antenna (about 150 ft high). Guy lines are insulated every 20 to 40 feet, closer near the tower. Fiberglass links at the tower.

I won't bore you with the details, but there are other antennas and towers scattered around. They are all over 300 or 400 feet from the tall tower. The important thing is I detune everything that isn't selected as the antenna being used to maintain patterns.

>Tom, is the SWR bandwidth of the dipole about what you would expect to see?

Seems fine to me. I can't really use the antenna outside the low end of the band, and the SWR on 80 meters is through the roof! I would expect less than an offscale reading on 80 if I had much feedline loss.

I have 300 feet of LMR 400 up the tower, with a choke balun of RG-8X. There's a choke at the bottom, about 50 feet of RG-8 foam "Superflex" cable. The feedline back to the tower is 7/8 inch heliax about 500 feet or so long. The antenna is #10 solid copperweld, with tarred nylon lines out maybe 700 feet or more holding the ends out.

You tell me. I'd sure like to use the tall tower! I installed it because the models told me the dipole would kick butt. What I find is I could have saved the money, I have vertical performance or less off the broadside and the vertical beats the dipole over 10 dB off the ends of the dipole!

Now a low dipole at 100-150 ft kicks butt 50-100 miles away. It's as much as 20 dB better at night than either the high dipole or vertical.

I think the wave angle is lower than people expect, but that's a guess. Right at sunrise, on some days, the dipole gets several dB better than the vertical. Only some days. Only at sunrise..unless we are having a nasty geomagnetic storm. Then the dipole works great, and that's maybe twice a year.

So is the wave mainly vertically polarized, the wave angle low, or does the vertical work better than the model shows?

73 Tom

1553. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:34:13 UTC
From: k1bqt@aol.com
Message-ID: <20000908203413.20767.00000312@ng-cf1.aol.com>
Source record: 181219

>Bandplans should be by current
usage, not by someone's ideas who probably hasn't listened to an
active amateur band in years.<

Bandplans should be mandated by the FCC based upon proposals for rulemaking and
not "suggested" by a minority entity motivated by special interest. Who in
hell gave Dave Sumner and his band of merry men this power anyway? Fill me in!

Rick K1BQT

1554. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 00:39:45 UTC
From: 2w8ji@contesting.com
Message-ID: <39b9862e.71029977@news.akorn.net>
Source record: 181220

On 09 Sep 2000 00:08:41 GMT, fractenna@aol.com (Fractenna) wrote:

>I wasn't confused.Your units were not dimensionally correct. I made the point
>that an order of magnitude is 10 dB--not 20 db WITH THESE UNITS.
>
>Now we have the usual imps trying to make me look like an idiot for it.
>
>73
>Chip N1IR

No one can make anyone else look like an idiot. People only make
themselves look like idiots.

Ed wrote:

>>The levels in various immunity standards are approximately 3 V/m. The levels
>>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>>correlate RFI and RFX issues with 20 dB of difference between the two.
>>
>>73,
>>Ed Hare, W1RFI

You replied:

>10 dB between those two values...

>73
>Chip N1IR

Why not just say you made a mistake, and move on?

73 Tom

1555. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:12:26 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <8pc2pqgrh1@news.hawaii.edu>
Source record: 181223

Richard Harrison <richardharrison@webtv.net> wrote:
>I`m dubious of the r-f hazards speculated by some. I`ve been radiated
>over many decades by by high power at frequencies from the aircraft
>beacon range to 6 GHz. Got an ear blackened by a 50-KW h-f transmission
>line. Climbed an a-m broadcast tower the same way everybody at the time
>did, that is while it was transmitting at full power. I`ve measured the
>illumination of microwave dish surfaces. I`ve worked day after day in
>shortwave broadcast antenna fields immersed in megawatts and more. I`ve
>spent years in broadcast plants. Knock on wood, all I ever got was r-f
>burns.

Rick: I swim 2 km in 30 minutes every morning in the ocean but certainly wouldn't recommend that rigorous of a workout to the population in general. That each of us are able to withstand what we subject our bodies to must mean we're both freaks of Nature, eh? =:o

73, Jeff KH6O

1556. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:14:16 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <jbgu5.604$u95.1564396@news.ntplx.net>
Source record: 181222

Fractenna <fractenna@aol.com> wrote:

> >It must be habit for me to use the terms precisely; when I say field
> >strength, I am talking about the electric or magnetic field. It would be
> >quite incorrect to say a "field strength" of 1 milliwatt/square
centimeter.
> >So, in the far field, the electric and magnetic fields vary by 1/D while
the
> >power density varies as 1/D^2. Hams often say field strength when
> >discussing power density, though, so some confusion is inevitable. (I
sure
> >did misuse the term before I had to learn more about it all to handle the
RF
> >exposure rules issue.) That is why I was careful to include the units as
> >V/m, to help clarify why I used the 20 log (ratio) formula.

> >Sorry for any confusion.

> I wasn't confused.Your units were not dimensionally correct. I made the
point
> that an order of magnitude is 10 dB--not 20 db WITH THESE UNITS.

Now, I *am* confused. The ratio between 27.5 V/m and 3 V/m, the figures I
used in my original post, is 19.24 dB. To what does the 10 dB relate?

> Now we have the usual imps trying to make me look like an idiot for it.

I'm certainly not trying to make anyone look foolish, just trying to make
sure we are discussing the same issue.

Thanks.

73, Ed

1557. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:16:44 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B98F7C.F4611116@bigfoot.com>
Source record: 181224

Roy Lewallen wrote:
> If the G5RV is fed in a way that forces or allows only equal and
> opposite currents on the feedline conductors, then the feedline won't
> radiate. You're right in that there's nothing special about a G5RV which
> makes it more or less prone to radiate than any other symmetrical
> antenna like a dipole.

Thanks Roy, that's all I was saying in response to this original posting:

"Especially antennas like the G5RV where the dipole is active mostly on the
low bands and the *feeder starts to act as radiator on higher bands* cannot
be modeled this way."
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1558. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:26:51 UTC
From: davem@cs.ubc.ca
Message-ID: <8pc3kr$gc6$1@newcastle.cs.ubc.ca>
Source record: 181225

Roy Lewallen <w7el@eznec.com> writes:

>From which the obvious conclusion is:

>a) Preschoolers are more professional than scientists.
>b) The test measures something other than professionalism.

My conclusion was that the person who wrote the test questions thinks more like a preschooler than a scientist. If that's the standard of "professionalism" used by Anderson Consulting, perhaps that tells us something about them too.

Dave

1559. Re: Monoband 4:1 Coax Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:30:38 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39B992BE.DACD37C@bigfoot.com>
Source record: 181226

Reg Edwards wrote:
> Cecil, when Z-matching it shouldn't be forgotten the
> feedline Zo is just as important as its length. To reproduce
> your results it is necessary to obtain a feedline of the
> same impedance as yours. I recall you mentioning your Zo is
> not the 450 ohms it says on the label.

Yep, the stuff I use is actually 380 ohms so I need an SWR
between 15:1 and 3.8:1. With open-wire 600 ohm line, the SWR
needs to be between 24:1 and 6:1. This is almost always the
case with wire dipoles at least 1/2WL long at the lowest frequency
of operation. (The SWR on a *folded dipole* is too low for my
impedance transforming technique to match 50 ohms.)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1560. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 01:58:32 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8pc5mrlbn1@bob.news.rcn.net>
Source record: 181227
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

At least one person saw this was supposed to be humorous!

Thanks, Ed!

Pete

Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:o8fu5.597$u95.1561937@news.ntplx.net...
> Peter, thanks; this one made my day. I will forward it to the VEC
Question
> Pool Committee and see if they can use it in the Extra Pool. That ought
to
> really keep the riffraff out of ham radio. :-)
>
> I cross posted this to rec.radio.amateur.policy; it is time this group
> cross-posted them for a change! :-) Besides, this thread really isn't much
> related to antennas. But I am glad you posted it anyway!
>
> 73,
> Ed Hare, W1RFI
>
> Peter Bertini <commquart@erols.com> wrote in message
> news:8pbkq1$6nu$1@bob.news.rcn.net...
> > The following short quiz consists of 4 questions and tells whether you
> > are qualified to be a "professional." Scroll down for each answer.
> >
> > 1. How do you put a giraffe into a refrigerator?
> >
> >
> >
> >
> >
> >
> > The correct answer is:
> >
> > Open the refrigerator, put in the giraffe and close the door.
> >
> > This question tests whether you tend to do simple things in an overly
> > complicated way.
> >
> >
> > 2. How do you put an elephant into a refrigerator?
> >
> >
> >

> >
> >
> > Wrong Answer: Open the refrigerator, put in the elephant and close the
> > refrigerator.
> >
> >
> > Correct Answer: Open the refrigerator, take out the giraffe, put in the
> > elephant and close the door.
> >
> > This tests your ability to think through the repercussions of your
> > actions.
> >
> >
> >
> > 3. The Lion King is hosting an animal conference. All the animals attend
> >
> > except one. Which animal does not attend?
> >
> >
> >
> >
> >
> >
> > Correct Answer: The Elephant. The Elephant is in the refrigerator.
> >
> > This tests your memory.
> >
> >
> >
> > OK, even if you did not answer the first three questions correctly, you
> > still have one more chance to show your abilities.
> >
> >
> > 4. There is a river you must cross. But it is inhabited by crocodiles.
> > How
> > do you manage it?
> >
> >
> >
> >
> >
> >
> > Correct Answer: You swim across. All the crocodiles are attending the
> > Animal Meeting.
> >
> > This tests whether you learn quickly from your mistakes.
> >
> >
> > According to Andersen Consulting Worldwide, around 90% of the
> > scientists they tested got all questions wrong. But many
> > preschoolers got several correct answers.
> >

> >
> >
> >
>
>

1561. Re: How to calculate wire equivalents of balanced feeders for EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 02:08:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39B99B81.6C8B49A0@eznec.com>
Source record: 181228

Sorry I missed the original posting. I agree; it's incorrect.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > If the G5RV is fed in a way that forces or allows only equal and
> > opposite currents on the feedline conductors, then the feedline won't
> > radiate. You're right in that there's nothing special about a G5RV which
> > makes it more or less prone to radiate than any other symmetrical
> > antenna like a dipole.
>
> Thanks Roy, that's all I was saying in response to this original posting:
>
> "Especially antennas like the G5RV where the dipole is active mostly on the
> low bands and the *feeder starts to act as radiator on higher bands* cannot
> be modeled this way."
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1562. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 02:37:30 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <hphu5.609$u95.1568944@news.ntplx.net>
Source record: 181229

K1BQT <k1bqt@aol.com> wrote:

>Bandplans should be mandated by the FCC based upon proposals for rulemaking and
> not "suggested" by a minority entity motivated by special interest. Who in
> hell gave Dave Sumner and his band of merry men this power anyway? Fill me in!

Hi, Rick,

I think the power to make suggestions is given to Dave by the Constitution.

There are many people who feel that the only rules that amateurs need are "here are your band edges; have fun."

I am not one of them, but I do not believe that strict rules and regulations are always the answer, either.

73,
Ed Hare, W1RFI

1563. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 03:06:53 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39B9A94D.CD226756@attglobal.net>
Source record: 181230

Hi, I started trimming it, to no avail... before I and actually checked the SWR at various frequencies from 26-30 mhz and it goes from about 5:1 to infinity (off the meter).

I'm ready to just trash the stupid thing and get a straignt whip.
I really can't have an antenna on the roof because it would be impractical and look like Hell (unless there's something out there I don;t know about.

If I read your message correctly , you described it perfectly with the coils, It probably isn't gonna work.... correct?

thanks, Wayne

n4zou@my-deja.com wrote:

> In article <8759-39B8DC53-6@storefull-117.iap.bryant.webtv.net>,
> richardharrison@webtv.net (Richard Harrison) wrote:
> > Wayne GHrauel wrote:
> > "Live and learn."
> >
> > Mobile whip springs are not loading coils. Inside should be an intact
> > strap to short out the spring. Bend the spring over and have a look.
> If
> > the shunt is missing or broken the spring should be discarded.
>
> The "springs" he is talking about are not at the base of the antenna
> and do not have a strap across them to short them out. They are very
> large inductors. The first one is about 2 feet from the base and the
> second one is about 6 inches above the top of the first antenna. They
> are used to load the 5 foot antenna for use on 11 meters.
> >
> > A 5-foot whip is too short to be a quarter-wave at 10 meters without a
> > loading coil. It is near 1/4-wave at 6 meters.
>
> Thats right and the reason for the very large inductors that look like
> springs.
> >
> > 108 inches is 9 feet or about 2.74 meters or about 1/4-wave at 11
> > meters. A whip this length may actually be too long in the 11-meter
> > band. High voltage at the tip of the antenna actually increases its
> > apparent capacitance. This effect depends on the length to diameter
> > ratio of the wire, but the usual rule is to shorten a whip 5% for "end
> > effects". This makes the 11-meter whip 102 inches long.
>
> The Radio Shack whip is 102 inches long and with the heavy spring
> added to the base makes it 108 inches long. As these antennas are

> mounted to a bumper and some part of the whip is close to the metal
> body, capacitance added to the system will require it to be just a
> little longer than required. This also brings the match impedance up a
> little more than the 37 ohms for a vertical mounted over a ground
> plain. Also as the ground plain extends in only one direction at the
> mounting point at the rear bumper this also tends to get the impedance
> closer to 50 ohms.
> >
> > A 5-foot whip will need a loading coil to resonate at 10 meters. You
> > could also consider a large capacitive hat to resonate the whip at a
> > lower frequency. The hat doesn`t have so much resistance to lower the
> > efficiency of the whip as a coil does. A combination of loading
> methods
> > can be used. You can check for resonance with whatever instruments you
> > may come by.
>
> The people that build this antenna have all kinds of stuff hang on it.
> None of it really improves the antenna but causes it to look impressive
> to people that know nothing about antenna's. They make a "beam antenna"
> that takes the place of the second inductor. It is really only a
> capatiance hat but there is about a 3 foot boom on it a 5 elements
> with a 6 radial capatiance hat on the back of the boom.
> >
> > When resonant at 1/4-wave, the impedance will not likely be too close
> to
> > 50 ohms. A 1/4-wave vertical is 1/2 of a 1/2-wave dipole. The other
> half
> > of the antenna is supplied by its image in the ground, car body,
> ground
> > plane, or what have you. The dipole in space has 75 ohms impedance and
> > 1/2 of that is about 37 ohms. the environment of the whip will shift
> its
> > impedance also and it may well be less than 37 ohms. You may consider
> 37
> > ohms close enough to 50 ohms and that`s just fine too.
> >
> > Some would prefer the convenience of a short loaded whip. Most CBers
> do.
>
> That is another problem with this antenna. It must have the inductors
> mounted high and away from the car or truck body to keep the stray
> capacitance at a constant level. You really need to see one of these
> things to understand the problems this antenna has. You end up with the
> top of the antenna higher than a 102 inch whip mounted to the bumper.
>
> > That`s why you see those little whips emerging from various sizes and
> > shapes of coils. It isn`t as efficient as a full-sized whip but may be
> > plenty good enough.
> >
> > Best regards, Richard Harrison, KB5WZI

> >
> >
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1564. Improving 900Mhz reception

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 03:09:21 UTC
From: Jenni <Jenni_Mc@nonforme.Bellsouth.net>
Message-ID: <39B9A9E1.DDD0FE37@nonforme.Bellsouth.net>
Source record: 181231

Hi all,

I have a wireless(portable) data terminal operation in the 900Mhz range. It's operating indoors. In the location where I would like to place it, I can't get any reception. I can, however, if I move it to a different location or take it outdoors. So I'm assuming the area is somewhat shielded. I spoke with the wireless data service provider and they said that a 3db high gain 900mhz antenna could help me improve reception. However, they were not very helpful in explaining how to connect it or where to get it . In addition the terminal has no connections for an external antenna and the unit is sealed. If I break the seal to open it and monkey with the stock antenna, I am liable for damages with the company I lease it from. So my questions to the group are:

Does anyone know a way to connect an auxiliary antenna to the existing antenna so I can run it to an area with better reception? or perhaps a way to passively improve the signal?

Where can I find a 3db high gain 900mhz antenna? (Radio shack wasn't very helpful and there is too much info to digest on the web)?

Am I going about this correctly or can someone suggest a better approach (i.e. repeater? amplifier?)?

Thanks in advance for the response and sorry for the long post but I wanted to get out all the details.

-Jen

/* To respond remove the "nonforme" node from my email address */

1565. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:01:34 UTC
From: sideband@mindspring.com
Message-ID: <39B9B61E.771A8CC1@mindspring.com>
Source record: 181235

Gilbert Mouget wrote:

> Salut,
>
> I am a bit puzzled.
> I bought a refrigerator.
> When I open the door there is a light inside.
> Is it possible to tell if the lamp is really switched off
> when the door is closed ?
>
> Thanks for the answers and 73
> --
> Gilbert.

Ask the giraffe. :-)

1566. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:02:51 UTC
From: k1bqt@aol.com
Message-ID: <20000909000251.20706.00000345@ng-cf1.aol.com>
Source record: 181233

Hi Ed--

>I think the power to make suggestions is given to Dave by the Constitution.<

"constitution"?

>There are many people who feel that the only rules that amateurs need are "here are your band edges; have fun."<

I would expect my license and my operating rules to come from the same place. My license didn't come from Newington. Did yours??

>....I do not believe that strict rules and regulations are always the answer, either.<

Should the right-seat passanger in an aircraft be allowed to express his need to "make suggestions" by placing a hand on the yoke? I don't think so.

Which "constitution" do you speak of? The US Constitution, the League's Constitution, or the Tasmainian Articles of Confederation?? I'm confused.

Rick K1BQT

1567. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:03:17 UTC
From: PAT JANKOWIAK <vaxhackery@worldnet.att.net>
Message-ID: <39B9B68B.64F79689@worldnet.att.net>
Source record: 181234

I think I'm beginning to understand about this. A DDRR pretends to be
a real short vertical antenna, sort of like trying to use an antenna
tuner to match a cellphone antenna for use on HF..

Jake Brodsky wrote:
>
> On Tue, 05 Sep 2000 18:06:21 GMT, 2w8ji@contesting.com (Tom W8JI)
> wrote:
>
> >It fits a nitch. If someone only has a tiny bit of vertical height and
> >a lot of horizontal space, it will at least radiate something.
> >
> >They don't say it's an efficient antenna, do they?
>
> True, but they should at least point out what is really radiating.
>
> In any case, I maintain that one could just as easily use a small
> loop.
>
> I think a loop is better understood than the DDRR...
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

1568. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:26:34 UTC
From: PAT JANKOWIAK <vaxhackery@worldnet.att.net>
Message-ID: <39B9BBC9.3A933EEF@worldnet.att.net>
Source record: 181236

I'd sure like to see two ways to get a license for HF operation.
One way would be to pass a code test and the usual electronics and
rules test.
The other way would not involve morse code, but would require a more
stringent electronics test.

At the risk of being called dumb or lazy, I've never been able to
master even 5 wpm, and given up long ago.

Maybe I'm being selfish, but I love to restore old tube type
plate-modulated gear as well as military radios, and I'd love nothing
better than to get the big old rig with the 4-1000 final and 304TH
modulators off the dummy and onto the nightly AM nets.. It's a real
commercial-duty showpiece, built by Durward J. Tucker in the '50's
(W5VU, bio article in CQ mag. April 1965, now a Silent Key).

I have no interest in using code, but I am interested in UHF, data,
TV, and spread spectrum in addition to boatanchor AM.

Richard Harrison wrote:
>
> Since there is so much competition for liesure time, and since stable
> ham gear is readily available, ham radio licensing should be no more
> onerous than driver licensing. Just test knowledge of the rules and
> equipment operation.
>
> Impose penalties for rules infractions. For public safety, radio
> operation is no more dangerous than driving.
>
> Best regards, Richard Harrison, KB5WZI

1569. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:37:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8pcepk$8r$4@bashir.peak.org>
Source record: 181239

Tom W8JI <2w8ji@contesting.com> wrote:

: So please someone, tell me what to do. I'd like to use that tall tower
: on 160, instead as a roost for Buzzards.

How about a full sized 2 element beam? Would the tower be stong
enough to stand the load?

--
Bill Nelson (billn@peak.org)

1570. Re: UHF TV reception

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 04:49:03 UTC
From: spschlein@earthlink.net
Message-ID: <8pcffqjtq1@nnrp1.deja.com>
Source record: 181237

Thanks to the input from everyone in this thread, I finally fixed the reception problem I described.

This afternoon, I attempted to replace the cable that connects the antenna on the roof to my television set. I discovered that the antenna part that contains the "posts" to which the cable is attached was corroded and that it had separated from the rest of the antenna. I replaced the antenna and the cable and the reception problem disappeared. Parts of the old antenna fell off as I took it down. Obviously, those "elements" were also corroded.

Thanks to all of you for your help!!

Sincerely,
Steve Schlein

Sent via Deja.com http://www.deja.com/
Before you buy.

1571. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 05:05:14 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8pcgea$8r$5@bashir.peak.org>
Source record: 181243

: So basically the answer is that I do not consider you a colleague, or one
: evincing professional behavior and will not honor your request, should it
: come
: from the proper channel.
:
: Next time, before you close doors, find out the size of the building.

Talk about appearing non-professional, as well as appearing to be an
arrogant ass.

You made an offer. The person provided prelimanary NEC results that appear
to meet your challenge. He has every right to submit that design to you,
and for you to honestly evaluate it and award the challenge amount if it
is indeed as described.

That would be true, whether the submitter is professional, arrogant, petty
or anything else. You did not set the condition that the person had to
kiss your feet before making the submission.

You are rapidly driving me to the point where I would refuse to purchase
an antenna from your company - even if it far outperformed every other
antenna in existance (which is highly unlikely as fractal antennas have
been around for decades). If they were so good, they would already be
in common use commercially.

--
Bill Nelson (billn@peak.org)

1572. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 05:19:38 UTC
From: 2w8ji@contesting.com
Message-ID: <39b9c57c.87238602@news.akorn.net>
Source record: 181240

On 9 Sep 2000 04:37:08 GMT, Bill Nelson <billn@spock.peak.org> wrote:

>How about a full sized 2 element beam? Would the tower be stong
>enough to stand the load?

Hi Bill,

I'd never be able to keep anything up but wires.

73 Tom

1573. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 05:22:53 UTC
From: 2w8ji@contesting.com
Message-ID: <39b9c8bb.88069902@news.akorn.net>
Source record: 181241

On Sat, 09 Sep 2000 04:03:17 GMT, PAT JANKOWIAK
<vaxhackery@worldnet.att.net> wrote:

>I think I'm beginning to understand about this. A DDRR pretends to be
>a real short vertical antenna, sort of like trying to use an antenna
>tuner to match a cellphone antenna for use on HF..

Well, sort of...except it's a top loaded cellphone antenna!!!

73 Tom

1574. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 05:31:18 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8pchv6$8r$6@bashir.peak.org>
Source record: 181242

Bill <bill@hovac.com> wrote:

: Has anyone seen an antenna and rotor like this mounted on top of a couple of
: lengths of conduit on the ground and pulled up next to the pole with a rope
: or cable ? Seems to me it could be done, but would like some feedback from
: anyone who may have tried to help find glitches in it before I try it (or
: not).

I haven't seen such a setup on conduit. However, you should be able to bolt a short length of 2" (or whatever size pipe the rotator base takes) to the pole. The mount has to be solid - not just raised with a cable.

If the rotator has bolt holes for mounting to a baseplate, it gets even easier - as you can bolt the rotator to the top of the pole.

In either case, to mount the rotator and antenna properly, you will need to either climb the pole or rent a bucket to get you up to the top of the pole.

I am assuming that it is your pole, and does not belong to the phone company.

--
Bill Nelson (billn@peak.org)

1575. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 05:50:22 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8pcj2u$8r$7@bashir.peak.org>
Source record: 181244

Martin Meserve <meserve@my-deja.com> wrote:

: The car body is generally used a the counterpoise, or ground plane,
: for the antenna. The optimum place for the antenna would be in
: the middle of your roof. Mounting it on the rear bumper may make
: it a little directional. That's not a problem when you are
: traveling down a nice straight highway, but on winding country
: roads it could cause a lot of signal fading as your car turns.

That proported "directionality" is much over-rated. It is slight
to non-existant.

I have run a bumper mounted whip for decades, and have not noticed
any directionality at all - and I drive winding country roads all
the time.

: You really want as much of the antenna in the clear as possible.
: A bumper mount tends to hide some of the whip.

Correct. The point of maximum radiation is low, but does not seem
to be a real problem.

--
Bill Nelson (billn@peak.org)

1576. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 06:10:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <8pck9h$8r$8@bashir.peak.org>
Source record: 181245

Gilbert Mouget <gilbert.mouget@waika9.com> wrote:

: Salut,

: I am a bit puzzled.
: I bought a refrigerator.
: When I open the door there is a light inside.
: Is it possible to tell if the lamp is really switched off
: when the door is closed ?

Very easily, if you have a way to measure the current that the
refrigerator draws. It is easiest when the motor is not running.

--
Bill Nelson (billn@peak.org)

1577. Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 06:37:30 UTC
From: alex <A_L_E_X1@yahoo.com>
Message-ID: <968470716.729360@nomad.vif.com>
Source record: 181232

Hi, All!!!
I've readed alot from these postings, but i can't find the answer to my question. How to build a UHF-VHF antenna, maybe you know a web-site with all the sizes and parameters of antennas, or maybe you can explain it here?

If it's important, I live in Canada, Quebec, Montreal.

Waiting for reply!!!

1578. Near Field / Far Field

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 07:48:49 UTC
From: Scott Mann <mann@uq.net.au>
Message-ID: <8pcpuk$gd2$1@bunyip.cc.uq.edu.au>
Source record: 181246

What causes the near field / far filed effect when measuring field strength in a miniture AM transmitter?

Is the relationship for distance vs strength 1/radius cubed in the near field and 1/radius squared in the far field?

1579. Looking for RF Concepts 2-417 Schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 09:27:05 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <Innu5.2421$Er2.487144@paloalto-snr1.gtei.net>
Source record: 181247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hello All,

I have an RF Concepts 2-417 2 meter amp that lost the pre-amp function.
Would anybody happen to have a schematic and/or manual that they could copy
or scan ? Will be glad to pay for the time and trouble.

Thanks and 73,

Dan - W6DKN

1580. Re: AAAAAAIIIIIIIIIIIIIIEEEEEEEEEEE ....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 10:10:32 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <6Vnu5.2242$Ek.7145@newsfeed.slurp.net>
Source record: 181248

.. and explains your participation in the strange behavior?

K3BHJ

1581. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 11:07:47 UTC
From: richardharrison@webtv.net
Message-ID: <29379-39BA1A03-2@storefull-112.iap.bryant.webtv.net>
Source record: 181249

Ed Hare, W1RFI wrote:
"I am not one of them, but I do not believe that strict rules and regulations are always the answer, either."

The only deviation from strict rules and regulations must be granted by jurisprudence in the courts.

FCC should not and can not enforce one word that isn`t clearly written in the rules. If questions arise, the judicial system, including the administrative law system, should resolve them.

You can`t have it both ways. You have strict rules and anything not prohibited by the rules goes, or you have madness.

Best regards, Richard Harrison, KB5WZI

1582. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 11:34:57 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39BA2060.6320D08D@bigfoot.com>
Source record: 181250

Gilbert Mouget wrote:
> And yes, there is an answer.

At the risk of posing a serious answer, simply locate and depress
the button switch that detects a closed door.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1583. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 11:48:47 UTC
From: Brad Wilson <w4bpw@arrl.net>
Message-ID: <Rypu5.2836$lk.15931@news2.atl>
Source record: 181251

I don't think there is a website that is the 'end all' of things for antennas, but the easiest antenna I have ever built (and that WORKED as it said it would) was a copper J-Pole for 2M. It is built from standard copper tubing you get at the hardware store, and I think mine cost about $6 US to build. Just search on the net or ARRL website for 2M J Pole and that should get you started, Mine was built using the directions in the ARRL 1996 Handbook, but all of the ARRL handbooks should have them in there...

Brad
W4BPW

The box said 'Use Windows 95 or better', so I installed Linux!

"alex" <A_L_E_X1@yahoo.com> wrote in message
news:968470716.729360@nomad.vif.com...
> Hi, All!!!
> I've readed alot from these postings, but i can't find the answer to my
> question. How to build a UHF-VHF antenna, maybe you know a web-site with
all
> the sizes and parameters of antennas, or maybe you can explain it here?
>

1584. Stealth antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 11:54:41 UTC
From: K4JDP@webtv.net
Message-ID: <5872-39BA2501-7@storefull-138.iap.bryant.webtv.net>
Source record: 181257

I'm currently using a G5RV-Jr. looped around the bedroom ceiling,
running 100 watts and less with a TS-830S and a tuner.

Any better ideas for an apt. antenna at a complex that prohibits outside
antennas? I've looked at Outbackers (all band whips) but I still
enjoying eating food and the other necessities of life that the money
could better be used for!

No I'm not moving out, my wife and I like it here a lot. (1 block from
the beach.)

Sincerely,
John

1585. stop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 11:57:28 UTC
From: David Pugh <dash.bi@ns.sympatico.ca>
Message-ID: <39BA2577.97339AA8@ns.sympatico.ca>
Source record: 181252

In relation to the information being sent to my computer. Please discontinue all information forwarding immediately. Thanks.

1586. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:02:29 UTC
From: fractenna@aol.com
Message-ID: <20000909080229.17108.00000322@ng-fl1.aol.com>
Source record: 181253

>
>
>: So basically the answer is that I do not consider you a colleague, or one
>: evincing professional behavior and will not honor your request, should it
>: come
>: from the proper channel.
>:
>: Next time, before you close doors, find out the size of the building.
>
>Talk about appearing non-professional, as well as appearing to be an
>arrogant ass.
>
>You made an offer. The person provided prelimanary NEC results that appear
>to meet your challenge. He has every right to submit that design to you,
>and for you to honestly evaluate it and award the challenge amount if it
>is indeed as described.
>
>That would be true, whether the submitter is professional, arrogant, petty
>or anything else. You did not set the condition that the person had to
>kiss your feet before making the submission.
>
>You are rapidly driving me to the point where I would refuse to purchase
>an antenna from your company - even if it far outperformed every other
>antenna in existance (which is highly unlikely as fractal antennas have
>been around for decades). If they were so good, they would already be
>in common use commercially.
>
>--
>Bill Nelson (billn@peak.org)
>

Bill,

I get this kind of threat all the time on this NG. I must tell you that at least two people got in trouble with their management because of such issues.

Imagine---

SAYING:"Yea boss; I know we save the most money and get the best performance with the (patented) fractal antenna--but I just don't LIKE the guy!"

BOSS: " What did he say that you didn't like?"

YOU:" Well, he said the other guy's results were wrong."

BOSS:" Hmmm...according to your hardcopy here, this guy Cohen was saying that the other guy was wrong because he had already built ones like it. And he also asked the other guy to send the file so he could give him some feedback. Sounds like a good way to get closure.'"

YOU: "But I just don't LIKE him. he's such an 'arrogant ass'.

BOSS:" Last month you said that about Bill Gates-- but this company isn't gonna throw away its PC's. Get back to work. besides, the other guy complaining is a competitor and slung enough libel as it was."

This is probably one of the most destructive uses of the internet--not to express OPINION<--but to make tangible and global efforts to destroy a high tech firm. Fortunately, those days are numbered: with this type of manipulation being shut down everyday, its only a matter of time before such libelous activity explicitly has laws written against it.

I've been here 5 years. I am patient. And right.

73
Chip N1IR

1587. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:04:21 UTC
From: fractenna@aol.com
Message-ID: <20000909080421.17108.00000323@ng-fl1.aol.com>
Source record: 181254

>A DDRR pretends to be
>a real short vertical antenna,

Pat--

I told you this:-) The circle phase cancels against the ground image in the far field, and only the vertical parts radiate. Given the fact that the circle has reactance and resistance, it functions as a load.

73
Chip N1IR

1588. Re: Why are there so many FRACTAL posts when the full moon is coming Do you believe that the moon have something

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:05:22 UTC
From: fractenna@aol.com
Message-ID: <20000909080522.17108.00000324@ng-fl1.aol.com>
Source record: 181255

The moon is always anout to be
'full' . It happens every 28 days.

73
Chip N1IR

1589. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:09:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pd9jo$s08$1@slb0.atl.mindspring.net>
Source record: 181256

Thread:

Not with the new fractal light bulbs recently developed by Fractal Filament Bulbs, Inc.

FFBI is a new startup firm provided with seed venture funding by GE Capital. FFBI has developed a new light bulb with the tungston filament bent into self similar (aka fractal) shapes.

This new bulb with the fractal filament is very much more efficient, lower losses, higher and more spectrally pure light output, and much smaller size because the fractal filament is bent into a much smaller space, etc...

In fact this fractal filament bulb is so efficient that GE's refrigerator division is considering leaving it on when the door is closed! Talk about innovation!

So what if the fractal filament is a bit more difficult to manufacture and assemble with it's delicate, flimsy, and kinky filamentary structure? That small lack of robustness is more than paid for with increased efficiency, smaller size, and great fame and fortune rained upon it's inventor, Dr. Latcarf, Ph.D.

Dr. Latcarf, graduated from one of the Ivy League schools, I think it was the one in Schenectedy, NY...

Dr. Latcarf has already established a moderated NG to help support his efforts because he doesn't want to become a "victim" of fame and fortune.

The new FFBI bulb is in fact so efficient that the "appliance bulb" versions draw practically indectable currents.

However, sadly, in the past when GE Capital has funded long life light bulb projects, they never seem to have been a big hit in the marketplace.

I only wish that the fractal light bulb inventors had got their funding from more conventional ROI driven pure financial venture capitalists rather than an industrial venture capitalist with a "side agenda".

We'll see if the FFBI fractal filament appliance bulb product is widely marketed after the next Consumer Electronics Show.

Fractal Filament Bulbs, Inc. have contracted for a display booth at that show in Chicago this January.

I for one am looking forward to it.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Gilbert Mouget <gilbert.mouget@waika9.com> wrote in message
news:MPG.14239ba558e8194f989736@news.free.fr...
>
>
> Salut,
>
> I am a bit puzzled.
> I bought a refrigerator.
> When I open the door there is a light inside.
> Is it possible to tell if the lamp is really switched off
> when the door is closed ?
>
> Thanks for the answers and 73
> --
> Gilbert.
>

1590. Re: (none)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:13:46 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pd9qq$8ep$1@slb7.atl.mindspring.net>
Source record: 181260

Quitter!

--
Peter O. Brackett
Morrisville, NC
--
Bob Ferrey, Jr. <n3dok@pgh.NET> wrote in message
news:39B8DA97.B5CFFB76@pgh.net...
> unsubscribe

1591. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:17:07 UTC
From: fractenna@aol.com
Message-ID: <20000909081707.17108.00000325@ng-fl1.aol.com>
Source record: 181258

I am extremely disappointed with some of the ignorance here.

If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the two is

27.5 v/m / 3 v/m

This is very close to a value of 10 and it is DIMENSIONLESS.

Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER ratios--BUT NOT ALWAYS!

Thus the ratio of voltages is a 10dB difference (approximate),

IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there is approximately a 20 dB difference in POWER.

Hope this helps. I don't want to see some youngster slinging around the idea that 20 dB corresponds to a ratio of 10.

73
Chip N1IR

1592. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:18:16 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba247e.9035377@news.akorn.net>
Source record: 181259

On 9 Sep 2000 05:05:14 GMT, Bill Nelson <billn@spock.peak.org> wrote:

>You are rapidly driving me to the point where I would refuse to purchase
>an antenna from your company - even if it far outperformed every other
>antenna in existance (which is highly unlikely as fractal antennas have
>been around for decades). If they were so good, they would already be
>in common use commercially.
>
>--
>Bill Nelson (billn@peak.org)

Hi Bill,

Can you imagine, after seeing how NC. Chip, or Nathen Cohen, PhD
behaves here, dealing with him on a disagreement on a million dollar
purchase...let alone a small purchase? Especially in light of his
constant threats to sue people over nothing?

Amazing!

73 Tom

1593. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:22:44 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdaav$j00$1@slb6.atl.mindspring.net>
Source record: 181261

Never forget that...

The radio spectrum belongs to "we the people".

It is only "by our leave" that we permit regulators and others (ARRL) make suggestions.

At any time "we the people" might just decide (Say by a "proposition" in an upcoming election maybe. Heh, heh, anyone buy this?) to usurp the power given by us to the regulators to oversee "our spectrum".

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:hphu5.609$u95.1568944@news.ntplx.net...
> K1BQT <k1bqt@aol.com> wrote:
>
> >Bandplans should be mandated by the FCC based upon proposals for
rulemaking
> and
> > not "suggested" by a minority entity motivated by special interest. Who
> in
> > hell gave Dave Sumner and his band of merry men this power anyway? Fill
> me in!
>
> Hi, Rick,
>
> I think the power to make suggestions is given to Dave by the
Constitution.
>
> There are many people who feel that the only rules that amateurs need are
> "here are your band edges; have fun."
>
> I am not one of them, but I do not believe that strict rules and
regulations
> are always the answer, either.
>
> 73,
> Ed Hare, W1RFI
>
>
>

>

1594. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:26:15 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdahi$4rl$1@slb6.atl.mindspring.net>
Source record: 181263

Richard:

Come on you shiftless, lazy freeloader, spend a few hours and learn the code
like the rest of us.

Who the hell do you think you are?

If Nathan can get a Ph.D. from an Ivy League School, then surely you can
pass the Morse test!

What???

Hope this helps with the Morse Code studies.

Peter (If I passed the test anyone can!) K1PO

--
Peter O. Brackett
Morrisville, NC
--
PAT JANKOWIAK <vaxhackery@worldnet.att.net> wrote in message
news:39B9BBC9.3A933EEF@worldnet.att.net...
> I'd sure like to see two ways to get a license for HF operation.
> One way would be to pass a code test and the usual electronics and
> rules test.
> The other way would not involve morse code, but would require a more
> stringent electronics test.
>
> At the risk of being called dumb or lazy, I've never been able to
> master even 5 wpm, and given up long ago.
>
> Maybe I'm being selfish, but I love to restore old tube type
> plate-modulated gear as well as military radios, and I'd love nothing
> better than to get the big old rig with the 4-1000 final and 304TH
> modulators off the dummy and onto the nightly AM nets.. It's a real
> commercial-duty showpiece, built by Durward J. Tucker in the '50's
> (W5VU, bio article in CQ mag. April 1965, now a Silent Key).
>
> I have no interest in using code, but I am interested in UHF, data,
> TV, and spread spectrum in addition to boatanchor AM.
>
> Richard Harrison wrote:
> >
> > Since there is so much competition for liesure time, and since stable
> > ham gear is readily available, ham radio licensing should be no more
> > onerous than driver licensing. Just test knowledge of the rules and

> > equipment operation.
> >
> > Impose penalties for rules infractions. For public safety, radio
> > operation is no more dangerous than driving.
> >
> > Best regards, Richard Harrison, KB5WZI

1595. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:29:16 UTC
From: fractenna@aol.com
Message-ID: <20000909082916.16953.00000267@ng-fl1.aol.com>
Source record: 181262

>
>On 9 Sep 2000 05:05:14 GMT, Bill Nelson <billn@spock.peak.org> wrote:
>
>>You are rapidly driving me to the point where I would refuse to purchase
>>an antenna from your company - even if it far outperformed every other
>>antenna in existance (which is highly unlikely as fractal antennas have
>>been around for decades). If they were so good, they would already be
>>in common use commercially.
>>
>>--
>>Bill Nelson (billn@peak.org)
>
>
>Hi Bill,
>
>Can you imagine, after seeing how NC. Chip, or Nathen Cohen, PhD
>behaves here, dealing with him on a disagreement on a million dollar
>purchase...let alone a small purchase? Especially in light of his
>constant threats to sue people over nothing?
>
>Amazing!
>
>73 Tom
>

Thomas Rauch, W8JI is in the process of being sued by me for libel and other illegal infractions.

Since January, 2000, I have asked him to stop harassing and abusing me and he has only stepped up his activities. In that time I have never responded to his puublic or private comments in any way.

Last week he threatened to stalk me at a public talk, and continues to do so with an open house next week.

Mr. Rauch lives in Georgia and thus slows down the civil process against him, as he is out of state.

Mr. Rauch also makes libelous statements in reference to Fractal Antenna Systems, Inc. It needs to be known that Mr. Rauch works as an active consultant for MFJ Enterprises, which is a major supplier of antennas9Telex/HyGain). Both Fractal Antenna Systems, Inc and MFJ Enterprises now compete for certain market niches in the antenna arena.

I urge you to consider the nature and motivation of the destructive and abusive comments from W8JI. They are not motivated by accuracy or information.

Nathan Cohen, Ph.D.

1596. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:29:46 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdapkrcf1@nntp9.atl.mindspring.net>
Source record: 181265

24 instead of 42?

Wow, this means now we can never trust anything Ed says.

--
Peter O. Brackett
Morrisville, NC
--
Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:Yv8u5.588$u95.1536798@news.ntplx.net...
>
> CAM <cam2338@bigfoot.com> wrote in message
> news:39B8FCF8.C4086002@bigfoot.com...
>
> > "Ed Hare, W1RFI" wrote:
>
> > > I rounded 19.42 dB up to 20 dB for the purposes of discussion.
>
> > Ed, Don't you mean "19.24 dB"? :-)
>
> Yes, mea cupla. Musta' been dyslexia when I looked at the result of the
> calculation on the screen.
>
> 73,
> Ed, W1RFI
>
>
>

1597. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:32:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdat6rek1@slb7.atl.mindspring.net>
Source record: 181267

Braggart!

Thats easy for you to do in HI, try that in Boston harbour year round!

--
Peter O. Brackett
Morrisville, NC
--
Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote in message
news:8pc2pqgrh1@news.hawaii.edu...
> Richard Harrison <richardharrison@webtv.net> wrote:
> >I`m dubious of the r-f hazards speculated by some. I`ve been radiated
> >over many decades by by high power at frequencies from the aircraft
> >beacon range to 6 GHz. Got an ear blackened by a 50-KW h-f transmission
> >line. Climbed an a-m broadcast tower the same way everybody at the time
> >did, that is while it was transmitting at full power. I`ve measured the
> >illumination of microwave dish surfaces. I`ve worked day after day in
> >shortwave broadcast antenna fields immersed in megawatts and more. I`ve
> >spent years in broadcast plants. Knock on wood, all I ever got was r-f
> >burns.
>
> Rick: I swim 2 km in 30 minutes every morning in the ocean but certainly
> wouldn't recommend that rigorous of a workout to the population in
> general. That each of us are able to withstand what we subject our
> bodies to must mean we're both freaks of Nature, eh? =:o
>
> 73, Jeff KH6O

1598. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:33:32 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba2ac2.10639552@news.akorn.net>
Source record: 181264

On Sat, 09 Sep 2000 06:34:57 -0500, CAM <cam2338@bigfoot.com> wrote:

>Gilbert Mouget wrote:
>> And yes, there is an answer.
>
>At the risk of posing a serious answer, simply locate and depress
>the button switch that detects a closed door.
>--
>73, Cecil, W6RCA http://www.mindspring.com/~w6rca

How would you know the switch behaves the same when pressed by the door? What if it doesn't work when pressed at the angle and distance the door presses it? How do you know the current change is due to the bulb going off, and not something else?

I'm afraid without actually going inside the refigerator and watching, or installing sensors to measure the actual changes, you really can't be absolutely sure the light goes off.

The most reliable test is always the most direct test, assuming you have instruments that detect the changes. Instead of connecting your senses to the light through instruments and wires that can fail, the best thing to do is go inside the refrigerator and have someone shut the door. Then, if your eyes happen to fail at the moment the door was closed, you could feel the bulb to see if it was cooling. You could stick your ear on the bulb, and listen for the filament vibrating from 60Hz AC. You could unscrew the bulb and put your tounge in the socket and see if it tastes like there is no voltage. You could smell the bulb, and see if it smells like it might be hot.

Then you would have to leave the refrigerator, and repeat the test seveal times with different testors to be sure no one was cheating.

When that was all done, you ship the data to Nathen Cohen, PhD and let him use incoherent averaging to factor out all the noise in the data.

Without all these steps, there is no way you can be sure the light goes off.

73 Tom

1599. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:35:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdb4fvak1@nntp9.atl.mindspring.net>
Source record: 181120

Ed:

Thanks for that analysis.

From empirical evidence, I too believe that the WSB em field was harmless.

I sat in it [My office was at the 41st floor level, about 5 blocks from the antenna, which was even higher.] daily for four years and I'm still fertile, heh, heh.

Regards,

Peter

--
Peter O. Brackett
Morrisville, NC
--
Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:3Ueu5.595$u95.1561146@news.ntplx.net...
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
> news:8pad4vevq1@slb1.atl.mindspring.net...
>
> > I worked in downtown Atlanta for a number of years and my office window
> > looked right out over the GA Tech campus at about the 40th floor level.
>
> > I always wondered when I looked at the midtown AM antenna of WSB...
>
> > WSB's AM clear channel MW tower is in midtown Atlanta. What are the EMI
> > levels a few blocks away at several hundred feet above sidewalk level?
>
> Hello, Peter,
>
> I assume a few blocks away is 300 feet. I assume that several hundred
feet
> above ground level is 400 feet. EZNEC estimates that a 5/8-wave vertical
> with 64 half-wave radials over good ground will create an E field of 13
V/m
> at that point. Somewhat above the 3 V/m typical of RFI problems, but xx
dB
> below the uncontrolled limit of 614 V/m.
>
> EZNEC predicts that the field with 50kW applied would be at 614 V/m 1.7
feet
> from the antenna at a point 400 feet above ground. The antenna is 614.7
> feet high in the model.

>
> 73,
> Ed Hare, W1RFI
>
>

1600. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:36:47 UTC
From: fractenna@aol.com
Message-ID: <20000909083647.20824.00000081@ng-fl1.aol.com>
Source record: 181266

Greetings--

I will be holding an open house from 10-1 on Saturday, Sept 16,2000 with my fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer (see ham page of

http://www.fractenna.com)

will be up for operating from N1IR. I will also have my station logs available for viewing the many successful 10M QSO runs I have experienced wit the FQY.

Please let me know by 12 Sept if you wish to attend; attendance will be limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as unuathorized cars will be towed due to restricted street parking. And please bring your license if you wish to operate.

I regret that some individuals will not be permitted to attend, due to their previous on-line behavior.

I am located in Belmont, MA, next to the new Boston Temple of the Mormons. I am 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions to those attending by 15 Sept.

Hope to see you then.

73
Chip N1IR

1601. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:40:37 UTC
From: fractenna@aol.com
Message-ID: <20000909084037.20824.00000082@ng-fl1.aol.com>
Source record: 181268

>Peter O. Brackett
>Morrisville, NC
>--

Peter--

I do not have the time when you will be at the open house. Keep in mind that this there will be restricted parking, and I cannot let folks in who aren't on the list. I need to know the time to put you on the list.

Best,
Chip N1IR

1602. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:42:01 UTC
From: fractenna@aol.com
Message-ID: <20000909084201.20824.00000083@ng-fl1.aol.com>
Source record: 181119

>> Rick: I swim 2 km in 30 minutes every morning in the ocean but certainly
>> wouldn't recommend that rigorous of a workout to the population in
>> general. That each of us are able to withstand what we subject our
>> bodies to must mean we're both freaks of Nature, eh? =:o
>>
>> 73, Jeff KH6O

Well I;m jealous:-)! Which island?

73
Chip N1IR

1603. Re: Near Field / Far Field

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:43:54 UTC
From: w1rfi@aol.com
Message-ID: <20000909084354.20785.00000372@ng-cf1.aol.com>
Source record: 181121

>What causes the near field / far filed effect when measuring field strength
>in a miniture AM transmitter?

Hello, Scott,

A complex subject. :-) There are actually two near-field phenomena; it only adds to my confusion that they are both called "near field."

The first is the "reactive" near field. In this region, very close to the antenna, energy is being put into the field, then almost immediately taken back -- well, most of it is taken back. This field exhibits the same characteristics as reactance in a circuit. The electric and magnetic fields can be very high in the reactive region, varying as 1/d^2 or higher.

Some of this energy, however, is not taken back, it becomes radiated. Once the energy is radiated, that portion the field *could* vary as 1/D (remember, we are talking individual electric or magnetic fields; the em field, comprised of the electric and magnetic fields traveling together vary as 1/D^2). (Actually, the radiated field from any infintesimally small part of the antenna does vary as 1/D, but the total field at any point is influenced by all of the infintesimally small parts of the antenna.)

From a point source, this radiating portion of the fields being created near the antenna would vary as 1/D, but at any one point, one is seeing the energy being radiated by each portion of the antenna. At a point very far from the antenna (the far field), all parts of the antenna are pretty much equidistant from each part of the antenna, so they all influence the field at that point equally, in proportion to the voltages and currents on each part of the antenna.

However, when one is very close to the antenna, one is NOT close to the antenna, one is close to *part* of the antenna, and farther away from other parts. So the field at that point is influenced more by some parts of the antenna than others. The net effect is that the electric (E) field and the magnetic (H) field are not necessarily at the far field relationship of 377 ohms; the E and H fields are not necessarily at right angles from each other and they do not necessarily vary with 1/D, but could even vary inversely.

For example, if one starts measuring the fields very near a high-impedance portion of the antenna, one would find a very high E field and a very low H field. As one moved away from the antenna, the measured E field would probably decrease faster than 1/D and the H field would probably *increase*. This is because as one moves away from being very close to the original point, the proportional effect of the different parts of the antenna that are radiating fields into the EM wave being created is different. As one approaches the far field, each antennna portion becomes closer and closer to

have the same influence as the other parts.

Where does the near-field and far-field "boundary" exist? There is no boundary. As one gets farther away from the antenna, one sees a relationship between the fields that is closer and closer to what it would be very far from the antenna. One is in the far field when the deviation from "ideal" is small enough for the purpose.

The general rule of thumb for the near-field/far-field boundary is:

FF = 2 * D^2/lambda

This would be a pretty good far-field distance for making field strength measurements or for measuring the far-field pattern of a dipole (errors would probably be less than 1 dB). But it probably would not be enough in the far field to measure the deep null the pattern of two phased verticals; one would probably have to be much farther away than that to make measurements accurate enough to be -20 dB from the main lobe.

There are certainly some good mathematics to describe the above "intuitive" explanation, but I do not know that they are. If any of the real experts here care to post some references, or a more technical explanation, I would welcome it. If any of the better writers care to post a more concise explanation, I would welcome that, too. :-)

73,
Ed Hare, W1RFI

1604. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:45:22 UTC
From: fractenna@aol.com
Message-ID: <20000909084522.17108.00000326@ng-fl1.aol.com>
Source record: 181122

>I sat in it [My office was at the 41st floor level, about 5 blocks from the
>antenna, which was even higher.] daily for four years and I'm still fertile,
>heh, heh.
>
>Regards,
>
> Peter

How do you know? Also, you said that you have hearing problems; any
correlation?

NC

1605. Re: Test

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:46:58 UTC
From: w1rfi@aol.com
Message-ID: <20000909084658.20785.00000373@ng-cf1.aol.com>
Source record: 181123

>From: "Touzet" touzet@bellsouth.net

>This is only a test. please relax. it won't happen on this group again.

One of the slickest ways to "test" one's connection to a newsgroup is to select a post, and post a reply. One can usually think of something to say, even if it is. "That is the most well written post I have ever seen; thanks!" It accomplishes the test and gets you out of the "silent majority" mode and into the action. :-)

If you are testing because you haven't been here before, welcome to the NG!

73, Ed Hare, W1RFI

1606. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:48:38 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdbt0dgg1@slb0.atl.mindspring.net>
Source record: 181127

Steve VE9SRB:

Congratulations on winning the $1000.00. Excellent contributions made in a most professional manner.

BTW... there are numerous of us on the NG who appreciate your contributions. Please stay around and participate more often.

Most of us who hang out here think of the Fractenna postings to the NG as the "Jerry Springer" show of USENET and simply take them as they are apparently offered simply as amusement for those with an unsophisticated sense of humor.

Thanks again, and

Best Regards,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
VE9SRB <srbest@worldnet.att.net> wrote in message
news:8pbh1pjjd1@news2.bit-net.com...
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000908080416.20258.00000159@ng-da1.aol.com...
>
> >
> >
> > READ my info carefully. I said that your design does not work as you
> describe.
> > This is from my EXPERIENCE--as I said-- with those spirals, which often
> are
> > the 'base' antenna I am ask to improve upon in RFID applications at
> Fractal.
> >
> > I did not imply that you should take that personally, but as a
motivation
> to
> > re-check what you did.
> >
> > It is impossible to get a high radiation resistance at the current max
> without
> > duplicate current max's. See what happens to yours. Then notice how much

> wire
> > you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1
1/2
> > waves of wire.
> >
>
> In "re-checking" my design, I modified the parameters a bit to change the
> resonant frequency and resonant resistance. The model is comprised of 964
> wire segments and was run on NEC4. Geometry was checked with GNEC (also
> running a NEC4 engine). Here is an overview of the results:
>
> Resonant Frequency: 13.765 MHz
>
> NEC4 Calculated Impedance: 40.87 + j0.82 ohms
>
> 2:1 SWR Bandwidth wrt 50 ohms (no matching): 1.73%
>
> Antenna Maximum Physical Aperture: 0.122 wavelengths by 0.133
wavelengths
>
> Total Wire Length in the Antenna: 1.564 wavelengths
>
> I could trade off wire length, aperture size, resonant frequency, resonant
> resistance, bandwidth, etc but did not want to spend anymore time on this
> one.
>
> BTW - This design occupied about 5 minutes of thought procees, not years
of
> research. Suck it up and send the check. (Now that's abusive)
>
> 73,
> Steve, VE9SRB
>
>
>
>

1607. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:52:05 UTC
From: w1rfi@aol.com
Message-ID: <20000909085205.20785.00000374@ng-cf1.aol.com>
Source record: 181124

>From: "alex" A_L_E_X1@yahoo.com

>Hi, All!!!

Hello, Alex.

>I've readed alot from these postings, but i can't find the answer to my
>question.

Glad to see you post. :-)

>How to build a UHF-VHF antenna, maybe you know a web-site with all
>the sizes and parameters of antennas, or maybe you can explain it here?

I am sure you will get lots of freindly references and info from the fine folks here.

A whole lot of HF, VHF and UHF antenna construction projects can downloaded from:

http://www.arrl.org/tis/info/antproj.html

Enjoy!

73,
Ed Hare, W1RFI

1608. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:53:23 UTC
From: Charles Davis <k4swb@bellsouth.net>
Message-ID: <MPG.1423fc3b9802eabb98969e@news1.lig.bellsouth.net>
Source record: 181125
Body handling: HTML body converted to readable text

In article <39B9A94D.CD226756@attglobal.net>, wgvideo@attglobal.net
says...
> Hi, I started trimming it, to no avail... before I and actually checked the
> SWR at various frequencies from 26-30 mhz and it goes from about 5:1 to
> infinity (off the meter).
>
> I'm ready to just trash the stupid thing and get a straignt whip.
> I really can't have an antenna on the roof because it would be impractical
> and look like Hell (unless there's something out there I don;t know about.

For a great performing 10m antenna, go to www.copper.com, and look at the
Wilson 1000 series. You can probably find them elsewhere, but copper will
probably have the best price. I run one on the top of my Blazer. SWR
bandwidth at 1.5 to 1 or less is almost 1 full MHz. With a tuner, I also
get good performance on 12m.

> If I read your message correctly , you described it perfectly with the
> coils, It probably isn't gonna work.... correct?

While you're there, look at some of the other antennas. You'll find what
you have there now also.

--
Charles Davis
K4SWB
<>

1609. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:54:18 UTC
From: w1rfi@aol.com
Message-ID: <20000909085418.20785.00000375@ng-cf1.aol.com>
Source record: 181126

>From: CAM cam2338@bigfoot.com

>At the risk of posing a serious answer, simply locate and depress
>the button switch that detects a closed door.

Yeah, but how do we really know that the closed door depresses the button enough? :-)

73,
Ed Hare, W1RFI

1610. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 12:58:08 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39BA33DF.1847@pacbell.net>
Source record: 181151

Fractenna wrote:
>
> I am extremely disappointed with some of the ignorance here.
>
> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the two
> is
>
> 27.5 v/m / 3 v/m
>
> This is very close to a value of 10 and it is DIMENSIONLESS.
>
> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER ratios--BUT
> NOT ALWAYS!
>
> Thus the ratio of voltages is a 10dB difference (approximate),
>
> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there is
> approximately a 20 dB difference in POWER.
>
> Hope this helps. I don't want to see some youngster slinging around the idea
> that 20 dB corresponds to a ratio of 10.
>
> 73
> Chip N1IR

This is why I waste my time reading these posts - a classic example
of fractal electromagnetics.

Tom Donaly KA6RUH

1611. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:01:41 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39BA34B5.12BE@pacbell.net>
Source record: 181152

Ed Hare, W1RFI wrote:
>
> Fractenna <fractenna@aol.com> wrote:
>
> > >It must be habit for me to use the terms precisely; when I say field
> > >strength, I am talking about the electric or magnetic field. It would be
> > >quite incorrect to say a "field strength" of 1 milliwatt/square
> centimeter.
> > >So, in the far field, the electric and magnetic fields vary by 1/D while
> the
> > >power density varies as 1/D^2. Hams often say field strength when
> > >discussing power density, though, so some confusion is inevitable. (I
> sure
> > >did misuse the term before I had to learn more about it all to handle the
> RF
> > >exposure rules issue.) That is why I was careful to include the units as
> > >V/m, to help clarify why I used the 20 log (ratio) formula.
>
> > >Sorry for any confusion.
>
> > I wasn't confused.Your units were not dimensionally correct. I made the
> point
> > that an order of magnitude is 10 dB--not 20 db WITH THESE UNITS.
>
> Now, I *am* confused. The ratio between 27.5 V/m and 3 V/m, the figures I
> used in my original post, is 19.24 dB. To what does the 10 dB relate?
>
> > Now we have the usual imps trying to make me look like an idiot for it.
>
> I'm certainly not trying to make anyone look foolish, just trying to make
> sure we are discussing the same issue.
>
> Thanks.
>
> 73, Ed

Ed, no one ever has to try to make Chip look foolish; he does a
good enough job all by himself.

Tom Donaly KA6RUH

1612. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:10:03 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <xyqu5.2428$Ek.7679@newsfeed.slurp.net>
Source record: 181128

So, continue the lesson in bafflegab-slinging-prevention for the youngsters
in this NG:

1. The proper use of 'dimensionless' values is ... ?

2. The proper use of 'dBV' is ... ?

3. The proper use of 'dBW' is ... ?

4. The proper conversion between dBV and dBW is ... ?

'Read the book' or 'Do your homework' as answers are disallowed.

K3BHJ

1613. $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:15:49 UTC
From: fractenna@aol.com
Message-ID: <20000909091549.15785.00000431@ng-cd1.aol.com>
Source record: 181129

Still nothing close:-) Happy to look over your file before you 'officially enter'.

Good luck!

73,
Chip N1IR

In order to encourage hams to understand the importance, advantages , and excitement of fractal-element antenna (FEA) technology, I am personally sponsoring a contest.

The objective of the contest is to produce any sort of antenna which has a performance advantage over the MI2 fractal loop element:

(see, for example, the ham page of:

http://www.fractenna.com)

Here's the rules:

OBJECTIVE: produce and model an antenna design with a superior figure of merit (FOM) compared to the MI2 design at it's lowest resonance., from a single contiguous piece of wire. Any form of load must be expressed as a wire form and not discrete components. Size must fit in a form factor of about 1/8 by 1/8 wave. Frequency 14.15 MHz.

FORMAT: All designs must be submitted as .ez model files. See http://www.eznec.com for EZNEC info]

FOM: (10 X(dBMax) + 5X (BW in percent relative to 50 ohms) + efficiency in percent)

[Note: I kept it simple on purpose so that no one will think this is an a posteriori bias] The dBMax must be a field strength, not a gain. That means it includes non-radiative losses]

DEADLINE: 30 September 2000.

SUBMISSIONS: An e-mail stating the FOM value to chipn1ir@aol.com. Only the best will be requested to submit the .ez file. DO NOT submit the .ez file unless requested.

RESULTS: POSTED ON this NG by 1 Nov 2000. In the event of no-winners, the closest value and design will be announced on this NG at that time.

Best of luck to all--

And learn about this exciting and useful technology!

73
Chip N1IR

1614. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:16:52 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <39BA3844.C80C911A@ix.netcom.com>
Source record: 181130

alex wrote:

> Hi, All!!!
> I've readed alot from these postings, but i can't find the answer to my
> question. How to build a UHF-VHF antenna, maybe you know a web-site with all
> the sizes and parameters of antennas, or maybe you can explain it here?
>
> If it's important, I live in Canada, Quebec, Montreal.
>
> Waiting for reply!!!

======
Hello Alex -- try HOMEBREW ANTENNAS LINKS at URL:
http://ac6v.com/pageant.html

--
73 From Rod In Oceanside, CA
Amateur Radio & DX Reference Guide
Featuring 100+ Pages, 750 Indexed Topics & 6000 Links
http://ac6v.com/
Over 770,000 Hits On The Counter

1615. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:28:07 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <kOqu5.2438$Ek.7913@newsfeed.slurp.net>
Source record: 181131

1. Put a lamp-socket-to-prong adapter inside the frige. Run an extension cord to the outside to the indicator of choice.

2. Drill a peephole in a wall of the frige. Avoid the refrigerant lines.

3. Replace the door with a transparent one.

4. Have the local replacement window scammer put a vinyl or glass-block window in one of the walls.

5. See if mushrooms grow better inside.

AAAAAAAAAAAAAAAAIIIIIIIIIIIIIIIIIIIEEEEEEEEEEEEthefullmooniscoming

K3BHJ

1616. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:52:41 UTC
From: richardharrison@webtv.net
Message-ID: <5319-39BA40A9-7@storefull-114.iap.bryant.webtv.net>
Source record: 181137

Chip, N1IR wrote:
"Thus the ratio of voltages (27.5 v/m / 3 v/m) is a 10 dB difference approximately."

That is a mistaken idea.
db = 10 log (power ratio)
and
db = 20 log (voltage ratio)
are really identical expressions.

If the voltage ratio is 10, (2) is the exponent needed to raise the base10 to the value of 100 which is the power ratio represented by a voltage ratio of 10. Ten times the voltage produces ten times the current and power is voltage times current, so the power ratio is 100.
db = 20 log(10) = 20 (1) = 20
or
db = 10 log(100) = 10 (2) = 20

The answer is the same whether the voltage ratio or the power ratio is used. This is as it must be because they are expressions of the same actual value.

Best regards, Richard Harrison, KB5WZI

1617. Re: All the infighting: a perspective...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:57:16 UTC
From: fractenna@aol.com
Message-ID: <20000909095716.15731.00000318@ng-cd1.aol.com>
Source record: 181132

> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>> I have it up as a background window. Every once and a while, I will
>respond to
>> a post. I read fast,. type fast, and shit 'on my feet',
>

I never, ever, ever, said this --nor do I use such vulgar descriptions on this NG. Never ever. This is a fraudulent post which has nothing to do with me.

NC

1618. Re: Why are there so many FRACTAL posts when the full moon is coming Do you believe that the moon have something

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 13:59:15 UTC
From: fractenna@aol.com
Message-ID: <20000909095915.15731.00000319@ng-cd1.aol.com>
Source record: 181133

QST--

You are invited to join one or all of the following lists on e-groups(formerly onelist). All these reflectors are e-mail based, friendly, objective, and moderated ,so that no spam, porn, off-topic, or personal-offensive posts are sent out. You will receive no off-list e-mails by subscribing: again; no spam.

These lists (with average recent subscriber sizes) are:

ANTENNAS@EGROUPS.COM 176 members
CROSSFIELDANTENNA@EGROUPS.COM 70 members
FRACTALANTENNA@EGROUPS.COM 255 members

Please review the descriptions at:

http://www.egroups.com

Please note the CFA list specifically deals with this antenna in an objectively critical fashion and no posts will be allowed that make grandiose claims without supporting data presented. To date, no data has been presented which requires the extraordinary claims made by some pundits: there is no evidence for better performance than any other small vertical antenna (and that performance is poor).

Fractal antenna posts should go the the fractal antenna reflector; not the antennas reflector.

To subscribe to any list, either go through the process at egroups, or to skip the process (and some say 'annoying questions') just do:

---------- -subscribe@egroups.com

where the ---------- is the name of a given list (such as 'fractalantenna')

If you have a specific question on this post, please e-mail me off-NG at chipn1ir@aol.com.

73,
Chip N1IR

1619. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:07:10 UTC
From: fractenna@aol.com
Message-ID: <20000909100710.15755.00000355@ng-cd1.aol.com>
Source record: 181134

>The levels in various immunity standards are approximately 3 V/m. The levels
>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>correlate RFI and RFX issues with 20 dB of difference between the two.
>
>73,
>Ed Hare, W1RFI
>
>

10 dB between those two values...

73
Chip N1IR>>

I repeat Ed; the "difference between these two values..."is of order 10 dB; not
20 dB.

The POWER difference is, of course of order 20 dB. But as posted, I have
concerns that some may have been unintentionally misled.

Best,
Chip N1IR

1620. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:11:34 UTC
From: k3bu@aol.com
Message-ID: <20000909101134.03305.00000134@ng-fe1.aol.com>
Source record: 181135

> I am patient.
>
>73
>Chip N1IR
>

Of what institution?

1621. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:14:09 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pdgkd$dh7$1@iac5.navix.net>
Source record: 181136

1.Take out the elephant, get in yourself and close the door.

--

Fred W4JLE
http://w4jle.com/

"Gilbert Mouget" <gilbert.mouget@waika9.com> wrote in message
news:MPG.142412b2fd597b6998973b@news.free.fr...
>
> 9 Sep 2000 06:10:57 GMT dans l'article
> <8pck9h$8r$8@bashir.peak.org>
> l'honorable Bill Nelson <billn@spock.peak.org> escrivit :
>
> > Gilbert Mouget <gilbert.mouget@waika9.com> wrote:
> >
> > : Salut,
> >
> > : I am a bit puzzled.
> > : I bought a refrigerator.
> > : When I open the door there is a light inside.
> > : Is it possible to tell if the lamp is really switched off
> > : when the door is closed ?
> >
> > Very easily, if you have a way to measure the current that the
> > refrigerator draws. It is easiest when the motor is not running.
>
>
> Sorry, I have no way to measure the current.
>
> And yes, there is an answer.
>
> --
> Gilbert.
>

1622. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:29:54 UTC
From: k3bu@aol.com
Message-ID: <20000909102954.03305.00000136@ng-fe1.aol.com>
Source record: 181139

>I do not have the time when you will be at the open house. Keep in mind that
>this there will be restricted parking, and I cannot let folks in who aren't
>on
>the list. I need to know the time to put you on the list.
>
>Best,
>Chip N1IR
>

New definition of OPEN HOUSE? Not to worry.

We will come by trains, planes, automobiles and with court order allowing anybody to enter that open house. Once it was advertised as open house it is open house. We will gladly park far away, but we have to see and touch the miraculous antennas and all those geniuses and meet their families. TV and Voice of America are also coming, it is going to be live broadcast to the world to give this deserved genius and his freaksonalities proper exposure after so many years of suffering on this bunch of PDH NG.

Gentlemen, start your engines!

1623. FA MFJ 259-B/ACC LAST HOURS GET IT NOW

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:31:43 UTC
From: chris fox ni4l <cfox007@bellsouth.net>
Message-ID: <39BA49CF.EA502F12@bellsouth.net>
Source record: 181138
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.cb

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=430523824
PLEASE CHECK OUT MY OTHER AUCTIONS THANKS

1624. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:35:25 UTC
From: richardharrison@webtv.net
Message-ID: <17274-39BA4AAD-5@storefull-117.iap.bryant.webtv.net>
Source record: 181143

Ed Hare, W1RFI wrote:
So in the far field, the electric and magnetic fields vary by 1/D while the power density varies as 1/D^2.

Yes, if you have 0.2 v/m at a mile and 106 microwatts per square meter, you have an unattenuated field producing 0.1 v/m at two miles and 26.5 microwatts per square meter at two miles. The inverse square law applies to the power in the wave (equally divided between the E & H fields) while the 1/D rule applies to the volts / meter.

When estimating field strengths I find it helpful to remember that the dilution caused by spatial expansion of the wave is 22 db attenuation in the first wavelength, then 6 db additional every time the distance doubles. As an example, the total attenuation is 28 db after the wave travels 2 wavelengths, 34 db after 4 wavelengths, etc.

Best regards, Richard Harrison, KB5WZI

1625. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:35:59 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pdhte$e24$1@iac5.navix.net>
Source record: 181140

Let me express this in simple terms, as the youngsters you are so concerned about might get the wrong idea.

YOU ARE WRONG!

I would explain it to you, but feel you need to dig into the relevant material. You will gain nothing if I do the work for you. If requested I can return to the basics but am reluctant to do so unless you submit questions via E-Mail. You must first submit a list of books you have researched. Hope this helps as I would not want to see some youngster slinging around the idea that you have even a remote chance of defending your position.

Frederic Hambrecht MSEE
--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message
news:20000909081707.17108.00000325@ng-fl1.aol.com...
> I am extremely disappointed with some of the ignorance here.
>
> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the
two
> is
>
> 27.5 v/m / 3 v/m
>
> This is very close to a value of 10 and it is DIMENSIONLESS.
>
> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER
ratios--BUT
> NOT ALWAYS!
>
> Thus the ratio of voltages is a 10dB difference (approximate),
>
> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there
is
> approximately a 20 dB difference in POWER.
>
> Hope this helps. I don't want to see some youngster slinging around the
idea
> that 20 dB corresponds to a ratio of 10.
>
> 73

> Chip N1IR

1626. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:40:56 UTC
From: k1bqt@aol.com
Message-ID: <20000909104056.08060.00000270@ng-ff1.aol.com>
Source record: 181141

> Drill a peephole in a wall of the frige.<

At last--the first sensible suggestion I've seen to date!!

Realistically, a .357 would be the fastest way to aquire a suitable peep-hole. Don't try to patent this important "breakthrough" method, though. If you try, you'ill likely be sued by Jimmy Buffet (and his wealthy Uncle) for infringmement on prior art. Seems Jimmy already holds a copyright in the lyrics of a song dealing with the pressures of cabin fever and a need to escape to someplace warm. Damned rich people!

Besides, it's illegal in most states to shoot a giraffe.

Rick K1BQT

1627. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:42:33 UTC
From: fractenna@aol.com
Message-ID: <20000909104233.22276.00000313@ng-cu1.aol.com>
Source record: 181142

>
>Chip, N1IR wrote:
>"Thus the ratio of voltages (27.5 v/m / 3 v/m) is a 10 dB difference
>approximately."
>
>That is a mistaken idea.
>db = 10 log (power ratio)
>and
>db = 20 log (voltage ratio)
>are really identical expressions.
>
>If the voltage ratio is 10, (2) is the exponent needed to raise the
>base10 to the value of 100 which is the power ratio represented by a
>voltage ratio of 10. Ten times the voltage produces ten times the
>current and power is voltage times current, so the power ratio is 100.
>db = 20 log(10) = 20 (1) = 20
>or
>db = 10 log(100) = 10 (2) = 20
>
>The answer is the same whether the voltage ratio or the power ratio is
>used. This is as it must be because they are expressions of the same
>actual value.
>
>Best regards, Richard Harrison, KB5WZI
>

Please read my previous posts Richard. What I said, in summary ,is that dB is a logarithmic scale that usually refers to power. However, we are not talking about powers here.

We are talking about voltage densities.

Thus

27.5 V/M / 3 V/M

is a dimensionless ratio corresponding to about 10 dB, where the dB refers to the units so used. Formerly, it's about

10 dBV/m

It is impossible to get power from these measurements. They are voltage densities, which, by dimensional analysis can never, ever, be translated to power.

Thus if you formally wish to restrict the dB method to POWERS, this will never apply.

Of course, one may take the voltage densities and calculate them as POWER DENSITIES (NOT power). In this case it is perfectly legitimate to square the values so stated to get a dB difference in POWER DENSITIES, which would thus be about 20 dB when expressed in the proper units.

With Best Wishes,
Chip N1IR

1628. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:48:34 UTC
From: richardharrison@webtv.net
Message-ID: <17272-39BA4DC2-34@storefull-117.iap.bryant.webtv.net>
Source record: 181149

Yuri, K3BU wrote:
"Gentlemen start your engines."

A real redneck knows those words as the final four of the national anthem!

Best regards, Richard Harrison, KB6WZI

1629. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 14:49:12 UTC
From: fractenna@aol.com
Message-ID: <20000909104912.22276.00000314@ng-cu1.aol.com>
Source record: 181144

>Let me express this in simple terms, as the youngsters you are so concerned
>about might get the wrong idea.
>
>YOU ARE WRONG!
>
>I would explain it to you, but feel you need to dig into the relevant
>material. You will gain nothing if I do the work for you. If requested I
>can return to the basics but am reluctant to do so unless you submit
>questions via E-Mail. You must first submit a list of books you have
>researched. Hope this helps as I would not want to see some youngster
>slinging around the idea that you have even a remote chance of defending
>your position.
>
>Frederic Hambrecht MSEE
>--
>

I think that it would be very instructive for you to use some objective reason
to show I am wrong. If so, I will publicly, profusely, and humbly apologize.
Please: your corrections to the below.

73
Chip N1IR

RE-POSTED:

Please read my previous posts Richard. What I said, in summary ,is that dB is a
logarithmic scale that usually refers to power. However, we are not talking
about powers here.

We are talking about voltage densities.

Thus

27.5 V/M / 3 V/M

is a dimensionless ratio corresponding to about 10 dB, where the dB refers to
the units so used. Formerly, it's about

10 dBV/m

It is impossible to get power from these measurements. They are voltage
densities, which, by dimensional analysis can never, ever, be translated to
power.

Thus if you formally wish to restrict the dB method to POWERS, this will never
apply.

Of course, one may take the voltage densities and calculate them as POWER DENSITIES (NOT power). In this case it is perfectly legitimate to square the values so stated to get a dB difference in POWER DENSITIES, which would thus be about 20 dB when expressed in the proper units.

With Best Wishes,
Chip N1IR

1630. Re: Why are there so many FRACTAL posts when the full moon is coming Do you believe that the moon have something

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:00:48 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdjja$a2m$1@slb6.atl.mindspring.net>
Source record: 181146

Hey:

What is wrong with the good ole USENET NG's. These venerable fora have been working efficiently since the beginnings of the Internet.

Why do we need new era NG's? Because some can't stand the "heat". As our beloved Harry Truman said, "if you can't stand the heat, get out of the kitchen!"

Opportunists, carpetbaggers, charlatans and profiteers seem to be setting up new lists and NG style operations and are trying to lure participants away from the long standing open and relatively commercial free fora provided by the USENET news groups.

I believe that the intents of these "shanghai" artists is to only further the business interests of those who wish to commercialize an inexpensive non-profit motivated open forum for discourse...

Comments, thoughts?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909095915.15731.00000319@ng-cd1.aol.com...
> QST--
>
> You are invited to join one or all of the following lists on
e-groups(formerly
> onelist). All these reflectors are e-mail based, friendly, objective, and
> moderated ,so that no spam, porn, off-topic, or personal-offensive posts
are
> sent out. You will receive no off-list e-mails by subscribing: again; no
spam.
>
> These lists (with average recent subscriber sizes) are:
>
> ANTENNAS@EGROUPS.COM 176 members
> CROSSFIELDANTENNA@EGROUPS.COM 70 members
> FRACTALANTENNA@EGROUPS.COM 255 members
>
>

> Please review the descriptions at:
>
> http://www.egroups.com
>
>
> Please note the CFA list specifically deals with this antenna in an
objectively
> critical fashion and no posts will be allowed that make grandiose claims
> without supporting data presented. To date, no data has been presented
which
> requires the extraordinary claims made by some pundits: there is no
evidence
> for better performance than any other small vertical antenna (and that
> performance is poor).
>
>
> Fractal antenna posts should go the the fractal antenna reflector; not the
> antennas reflector.
>
> To subscribe to any list, either go through the process at egroups, or to
skip
> the process (and some say 'annoying questions') just do:
>
>
>
> ----------------- -subscribe@egroups.com
>
> where the ------------ is the name of a given list (such as
'fractalantenna')
>
>
> If you have a specific question on this post, please e-mail me off-NG at
> chipn1ir@aol.com.
>
> 73,
> Chip N1IR
>
>
>
>
>
>

1631. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:03:19 UTC
From: k3bu@aol.com
Message-ID: <20000909110319.03305.00000141@ng-fe1.aol.com>
Source record: 181145

>> BTW - This design occupied about 5 minutes of thought procees, not years
>of research. Suck it up and send the check. (Now that's abusive)
>>
>> 73,
>> Steve, VE9SRB
>>
>>
>>

Steve,
unfortunately you are dealing with joker. You can get better arguments from a brick wall or a piece of bamboo then from Freak.

Way back (when I didn't know the Freak) I offered $1000 prize and challenged him to bring his Fructal antenna to one of VHF antenna measuring contests and show that it will beat my antenna of similar envelope. Loooong, dead silence. Must have been affraid of impartial measurement of the real thing.

Then when newspaper was interested in writing up story about his magical twisted wires, and found out that Freak did not take up the challenge, Freak did his freaky thing. He "accepted" the challenge, by under his "rules". By then I realized who am I dealing with and since then I enjoy occasional comedy and entertainment that Freak is providing.

You could go through the archives, read the "history" and get the full story, but I doubt it is worth it. If you engage with him in any argument or discussion, you will eventually end up being threatened to be sued. We are trying to ingore him, maybe he will go away, but new people join here and get sucked to his trolling and it takes while to realize what are they dealing with.

The rest here are sane people, so stick around, just take the Freak for what he is, have fun. You can never win with him, he is perfect, never makes mistakes, always right even if wrong. What else can be said?

73 Yuri, K3BU, VE3BMV, VE1BY

1632. Re: AAAAAAIIIIIIIIIIIIIIEEEEEEEEEEE ....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:04:43 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdjqladh1@slb6.atl.mindspring.net>
Source record: 181147

Cajuns, Cajuns....

Wher'd those Cajuns come from?

--
Peter O. Brackett
Morrisville, NC
--
David J. Windisch <davidw@copper.net> wrote in message
news:Ewdu5.1488$Ek.4168@newsfeed.slurp.net...
> The full moon approaches ....
>
>

1633. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:15:25 UTC
From: w1rfi@aol.com
Message-ID: <20000909111525.20761.00000396@ng-cf1.aol.com>
Source record: 181148

>From: "Peter O. Brackett"

>24 instead of 42?

>Wow, this means now we can never trust anything Ed says.

Actually, that was 19.24 vs 19.42, a difference of 0.08 dB, or am I supposed to take 10*log(19.25/19.42), or was that 20*log... gosh, now I am ALL mixed up. :-)

73,
Ed Hare, W1RFI

1634. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:16:15 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdkgu$67l$1@slb7.atl.mindspring.net>
Source record: 181153

Chip:

Thanks for the "heads up" on the parking.

Tom and I will be arriving by taxi and so don't worry about parking. We will call a return cab using our HT's over a local repeater.

As to the exact time, we are quite flexible, I have misplaced the open house times, and so I would appreciate if you could please post the times for the open house again so that we can choose an arrival time of greatest potential visitor participation.

Looking forward to it...

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909084037.20824.00000082@ng-fl1.aol.com...
> >Peter O. Brackett
> >Morrisville, NC
> >--
>
> Peter--
>
> I do not have the time when you will be at the open house. Keep in mind
that
> this there will be restricted parking, and I cannot let folks in who
aren't on
> the list. I need to know the time to put you on the list.
>
> Best,
> Chip N1IR

1635. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:16:53 UTC
From: w1rfi@aol.com
Message-ID: <20000909111653.20761.00000397@ng-cf1.aol.com>
Source record: 181150

>From: 2w8ji@contesting.com (Tom W8JI)

>I'm afraid without actually going inside the refigerator and watching,
>or installing sensors to measure the actual changes, you really can't
>be absolutely sure the light goes off.

Could we judge by looking at the pupil dilation of the giraffe or the elephant?
:-)

73,
Ed Hare, W1RFI

1636. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:23:59 UTC
From: w1rfi@aol.com
Message-ID: <20000909112359.20761.00000398@ng-cf1.aol.com>
Source record: 181154

>From: k1bqt@aol.com (K1BQT)

>> Drill a peephole in a wall of the frige.<

>At last--the first sensible suggestion I've seen to date!!

My wife strongly disagreed. She mumbled something about needing a new refrigerator, though. Maybe the bulb IS burned out. :-)

73,
Ed Hare, W1RFI

1637. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:27:13 UTC
From: w1rfi@aol.com
Message-ID: <20000909112713.20761.00000399@ng-cf1.aol.com>
Source record: 181155

>From: k1bqt@aol.com (K1BQT)

>>I think the power to make suggestions is given to Dave by the Constitution.<

>"constitution"?

Actually, no, I meant the US Constitution. The right of people and organzations to make suggestions is covered under the provisions for free speech. Those same provisions also give people the right to decide whether to ask the government to make those suggestions into law, in which case everyone has to follow them, or leave them as suggestions, in which case people are free to follow them if they think they ara good idea.

On what basis would you offer that Dave should not be permitted to make suggestions to the amateur community?

73,
Ed Hare, W1RFI

1638. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:28:08 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdl77dgb1@slb7.atl.mindspring.net>
Source record: 181157

Chip:

Well my hearing problems (tinnitus) certainly pre-date my WSB AM antenna field immersion and so that's not correlated.

Heh, heh, Fertility, well.... I believe you may have hit on something else though... you could be right.

My poor deceased father once told me that "hearing" is the second thing that goes... and so...

If I do have fertility problems now, it also might have predated the WSB field immersion.

I agree that I do not have "definitive" proof of my current fertility since, usually only the mother knows for sure who the father is...

and so...

I am prepared to stand corrected on the fertility issue.

Of course, as an engineer, I will only accept correction of my fertility status upon submission of incontrovertible DNA evidence.

Chip, Tom and I are looking forward to the open house.

I hope those "latter day saints" don't ruin the propagation.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message news:20000909084522.17108.00000326@ng-fl1.aol.com...
> >I sat in it [My office was at the 41st floor level, about 5 blocks from the
> >antenna, which was even higher.] daily for four years and I'm still fertile,
> >heh, heh.
> >
> >Regards,
> >
> > Peter
>
> How do you know? Also, you said that you have hearing problems; any
> correlation?

>
> NC

1639. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:30:22 UTC
From: k1bqt@aol.com
Message-ID: <20000909113022.08060.00000274@ng-ff1.aol.com>
Source record: 181156

Yuri--

You'll likely see yourself on Boston TV during your grand entrace. Confidential media sources predict several disgruntled Ledgewood Place residents have planned events for that day in an effort to disrupt traffic flow to the new Morman Temple's open house which is schelduled concurrently. Should be lots of congestion, confusion, police, media, choppers overhead, and a huge backup on the inbound side of Rt 2 as vehicles attempt to enter and depart the narrow and paritally-clogged suburban street! Since 2 Ledgewood is at the very entrance of the streed, it is especially stategic. Show your courtesy by parking with all four wheels on the pavement so as to preserve the conditions of lawns boardering the roadway. Also, leave your car in a high-ratio gear to ensure extensive transmission damage, should it be illegally towed by the City of Belmont (great way to get a new set of wheels). Cross-country truckers and "Hum-V's" owners will be given special priority on the guest list.

If you've got a b-i-g amp, bring that along, too. Might be a great opportunity to test the Temple's PA system for RFI!

Rick K1BQT

Disclaimer: I have no idea at all if any of this is true, but if someone stuck that monster temple in my back yard, I'd sure be PO'd!!

1640. Re: Balun for a all-bander dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:37:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdlp5rnd1@slb3.atl.mindspring.net>
Source record: 181158

Rick:

Reg won't understand "see saw", that's an Americanism [er USAism]. He'll probably call you a nit.

The proper [OED] English expression for that children's play ground equipment is "tilt".

Hope this helps.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
K1BQT <k1bqt@aol.com> wrote in message news:20000823195437.17240.00000041@ng-fl1.aol.com...
> Hi Reg-
>
> When you get on the see-saw with a person of your weight, we know it's best if
> the fulcrum is in the middle.
>
> When you get on a see-saw with a really fat person, shouldn't you try to place
> the fulcrum at a position that doesn't require him to either get off the board
> or push hard with his legs to start the return trip??
>
> Or am I a nit? What say you??
>
> Rick K1BQT

1641. Re: hewmer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:41:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdm13$sl5$1@slb7.atl.mindspring.net>
Source record: 181159

David:

Thanks for that piece of humor. I thought I'd heard/seen most of them,
but's that's a new one for me.

Mind if I use it elsewhere?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
David J. Windisch <davidw@copper.net> wrote in message
news:ZOwt5.42$477.755@newsfeed.slurp.net...
> Useful unit conversions:
>
> 10**12 Microphones = 1 Megaphone
> 10**6 bicycles = 2 megacycles
> 500 millinaries = 1 seminary
> 2000 mockingbirds = two kilomockingbirds
> 10 cards = 1 decacards
> 1/2 lavatory = 1 demijohn
> 10**-6 fish = 1 microfiche
> 453.6 graham crackers = 1 pound cake
> 10**12 pins = 1 terrapin
> 10**21 picolos = 1 gigolo
> 10 rations = 1 decoration
> 100 rations = 1 C-ration
> 10 millipedes = 1 centipede
> 3 1/3 tridents = 1 decadent
> 5 holocausts = 1 pentacost
> 10 monologs = 5 dialogues
> 5 dialogues = 1 decalogue
> 2 monograms = 1 diagram
> 8 nickles = 2 paradigms
> 2 snake eyes = 1 paradise
> 2 wharves = 1 paradox
>
> ...and remember the old metric saying:
>
> Give a man 2.54 centimeters and he'll take 1.61 kilometers...
>
>
> K3BHJ

>
>

1642. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 15:52:03 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39BA5CA3.A2E4EAF3@wb6hqk.ampr.org>
Source record: 181160

Fractenna wrote:
>
> I am extremely disappointed with some of the ignorance here.
>
> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the two
> is
>
> 27.5 v/m / 3 v/m
>
> This is very close to a value of 10 and it is DIMENSIONLESS.
>
> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER ratios--BUT
> NOT ALWAYS!
>
> Thus the ratio of voltages is a 10dB difference (approximate),
>
> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there is
> approximately a 20 dB difference in POWER.
>
> Hope this helps. I don't want to see some youngster slinging around the idea
> that 20 dB corresponds to a ratio of 10.
>

Perhaps a quote from "Reference Data For Radio Engineers", Howard Sams -
1975 will be helpful. Under fair use:

Section 3-15 Titled "Decibels and power, voltage, and current ratios"

"The decibel, abbreviated dB, is a unit used to express the ratio
between two amounts of power, P1 and P2, existing at two points. By
definition number of dB=10 * log10(P1 / P2). It is also used to express
voltage and current ratios: number of dB=20 * log10(V1 / V2)=20 *
log10(I1 / I2). Strictly, it can be used to express voltage and current
ratios only when the voltages or currents in question are measured at
places having identical impedances."

bart
wb6hqk

1643. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:15:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdo08egi1@slb0.atl.mindspring.net>
Source record: 181164

Tom:

Or rather an example of fractured dB usage.

It seems that Chip is getting reckless and sloppy with definitions again.
Just don't fly on any airplanes designed by Chip!

BTW... the operative unit is not the dB, rather it is the Bell abbreviated
B.

The Bell is named after Alexander Graham Bell, a native of Scotland,
inventor of the telephone, one time Canadian, resident of Brantford,
Ontario, of Baddeck, Nova Scotia, and of Boston, MA.

As Chip stated, one tenth of a Bell, known as the deciBell widely
abbreviated as the dB is indeed a logarithmic measure of numerical ratios of
like quantities which perforce are necessarily dimensionless units .

The conventional and usual electrical Engineering usage of dB is in the
measurement of ratios of powers. [i.e. dB is defined in all textbooks,
reference books, handbooks, and technical dictionaries to be 10 times the
logarthim to the base 10 of a ratio of two powers. --- End of story, Chip
is WRONG!]

Chip's assertion that it is defined as a ratio of other quantities is not
the normal or usual usage of dB's.

In many parts of the world outside of America [Reg won't like that usage,
heh, heh.] the Neper or Np is the operative unit.

The Neper or Np is based upon Naperian or "natural" logarithms.

Natural logarithms, as every scientist knows, and engineers don't care, is
defined by a certain definite integral.

And so... in Germany, France, Japan and other advanced countries, one will
find Np in wide use rather than base 10 logarithms as is the Bell [B] and
dB. There is no common fractional nomenclature for fractions of a Neper
such as deciNp, etc...

It seems in my long experience of hiring and managing both Engineers and
scientists, that scientists just don't get dB's.

I have come to the conclusion that misuse of dB's by scientists is simply
because dB is an Engineering unit and scientists feel uncomfortable with
Engineering units.
Scientists seem to feel that the important part is that the "dimensionless
argument" of the dB function is the upper limit on a definite integral and

that multiplying it by a factor of either 10 or 20 is of no consequence.

Details, details, don't bother me with details...

As you know Engineering is a Profession, and science is merely a field of study.

Hence scientists are often "sloppy" in their practice and use of scientific measurements and constructions.

In retort to their complaints, I would ask, "Mr. Scientist, would you rather fly in an airplane, or cross a bridge, designed by an Engineer or by a scientist?"

Accuracy and precision are legal requirments of a Profession like Engineering, but not of scientists.

Hope this helps others in understanding correct dB usage.

Peter [I'm an Engineer, not a scientist] K1PO

--
Peter O. Brackett
Morrisville, NC
--
Donaly <dtdonaly@pacbell.net> wrote in message
news:39BA33DF.1847@pacbell.net...
> Fractenna wrote:
> >
> > I am extremely disappointed with some of the ignorance here.
> >
> > If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of
the two
> > is
> >
> > 27.5 v/m / 3 v/m
> >
> > This is very close to a value of 10 and it is DIMENSIONLESS.
> >
> > Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER
ratios--BUT
> > NOT ALWAYS!
> >
> > Thus the ratio of voltages is a 10dB difference (approximate),
> >
> > IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and
there is
> > approximately a 20 dB difference in POWER.
> >
> > Hope this helps. I don't want to see some youngster slinging around the
idea
> > that 20 dB corresponds to a ratio of 10.
> >

> > 73
> > Chip N1IR
>
> This is why I waste my time reading these posts - a classic example
> of fractal electromagnetics.
>
> Tom Donaly KA6RUH
>
>

1644. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:16:06 UTC
From: richardharrison@webtv.net
Message-ID: <29378-39BA6246-49@storefull-112.iap.bryant.webtv.net>
Source record: 181171

Chip, N1IR wrote:
"It is impossible to get power from these measurements."

It is possible, I believe, to infer power from these measurements. If not, I don`t know what i`m missing.

A radiated power expands producing a density which declines in watts per square meter in the wavefront as it expands throughout space. The same total power is in the wavefront at any distance from the sender minus other losses which may be encountered enroute.

The volts per meter are representative of the power in a square meter of the wavefront.

Best regards, Richard Harrison, KB5WZI

1645. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:16:16 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <gondp8.1ia.ln@mail.specsol.com>
Source record: 181166

Bart Rowlett <bart@wb6hqk.ampr.org> wrote:
> Fractenna wrote:
>>
>> I am extremely disappointed with some of the ignorance here.
>>
>> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the two
>> is
>>
>> 27.5 v/m / 3 v/m
>>
>> This is very close to a value of 10 and it is DIMENSIONLESS.
>>
>> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER ratios--BUT
>> NOT ALWAYS!
>>
>> Thus the ratio of voltages is a 10dB difference (approximate),
>>
>> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there is
>> approximately a 20 dB difference in POWER.
>>
>> Hope this helps. I don't want to see some youngster slinging around the idea
>> that 20 dB corresponds to a ratio of 10.
>>

> Perhaps a quote from "Reference Data For Radio Engineers", Howard Sams -
> 1975 will be helpful. Under fair use:

> Section 3-15 Titled "Decibels and power, voltage, and current ratios"

> "The decibel, abbreviated dB, is a unit used to express the ratio
> between two amounts of power, P1 and P2, existing at two points. By
> definition number of dB=10 * log10(P1 / P2). It is also used to express
> voltage and current ratios: number of dB=20 * log10(V1 / V2)=20 *
> log10(I1 / I2). Strictly, it can be used to express voltage and current
> ratios only when the voltages or currents in question are measured at
> places having identical impedances."

> bart
> wb6hqk

No fair using a real reference :-)

As a side note, it is implied from the definition that the values being
compared are in the same units and you are therefor taking the log of
a dimenionless ratio. If the ratio weren't dimensionless, you wouldn't
be getting decibels.

I would think a scientwist would know such basics, or is this just a really stupid troll.

Jim Pennino

1646. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:20:29 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdo8m$pp1$1@slb6.atl.mindspring.net>
Source record: 181165

Ed:

Sorry Ed, I know it's a minor slip up, and ... I'd like to cut you some slack, but...

now that you have become "Mr. RFI" we all have to hold you to a higher standard!

Sort of like what we do with our Presidents [Of the USA not of the ARRL].

As we all know, 24 or 42 is of no consequence, unless it refers to age!

Best Regards,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
W1RFI <w1rfi@aol.com> wrote in message
news:20000909111525.20761.00000396@ng-cf1.aol.com...
> >From: "Peter O. Brackett"
>
> >24 instead of 42?
>
> >Wow, this means now we can never trust anything Ed says.
>
> Actually, that was 19.24 vs 19.42, a difference of 0.08 dB, or am I
supposed to
> take 10*log(19.25/19.42), or was that 20*log... gosh, now I am ALL mixed
up.
> :-)
>
> 73,
> Ed Hare, W1RFI

1647. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:21:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba6325.25077047@news.akorn.net>
Source record: 181163

On 09 Sep 2000 12:36:47 GMT, fractenna@aol.com (Fractenna) wrote:

>
>I am located in Belmont, MA, next to the new Boston Temple of the Mormons. I am
>5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions to
>those attending by 15 Sept.
>
>Hope to see you then.
>
>73
>Chip N1IR

I'll see you all there! I'll bring my ticket.

73 Tom

1648. LAST MINUTES FA MFJ259-B+ACC.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:23:52 UTC
From: chris fox ni4l <cfox007@bellsouth.net>
Message-ID: <39BA6417.33911D3B@bellsouth.net>
Source record: 181162
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=430523824

1649. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:34:46 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdp3ruqh1@slb3.atl.mindspring.net>
Source record: 181169

Yuri:

How thoughtless of you.

A completely one-sided view.

You explained Fractenna to Steve, but you didn't advise Steve to stop his attempts to victimize Fractenna.

It's tough trying to champion new ideas without having folks show up demonstrating superior comparables.

And clearly we can all see that Steve was attempting to terrorize and oppress the poor victims at Fractenna with his superior antenna design.

Why not tell Steve to cut Fractenna some slack, tell him to stop challenging Fractenna, tell him that new ideas deserve a honeymoon or incubation before being attacked or compared to other ideas.

Yuri, your support for Steve could end up costing Fractenna $1000.00 of hard earned American taxpayer dollars!

Remember that we have all contributed to that fractal antenna research through the thoughtful distribution of our tax dollars by one of our Federal agencies, at least we could cut them enough slack to let them keep the $1000.00.

On the other hand, maybe you are a proponent of the theory of "survival of the fittest", and like the Roman Mob you just like to see the best antenna win.

Thoughts, comments,

Peter K1PO, ex AB4BC, VE1AEX, VE2POB, VE3DZK....

--
Peter O. Brackett
Morrisville, NC
--
Yuri Blanarovich <k3bu@aol.com> wrote in message
news:20000909110319.03305.00000141@ng-fe1.aol.com...
> >> BTW - This design occupied about 5 minutes of thought procees, not
years
> >of research. Suck it up and send the check. (Now that's abusive)
> >>
> >> 73,
> >> Steve, VE9SRB
> >>

> >>
> >>
>
> Steve,
> unfortunately you are dealing with joker. You can get better arguments
from a
> brick wall or a piece of bamboo then from Freak.
>
> Way back (when I didn't know the Freak) I offered $1000 prize and
challenged
> him to bring his Fructal antenna to one of VHF antenna measuring contests
and
> show that it will beat my antenna of similar envelope. Loooong, dead
silence.
> Must have been affraid of impartial measurement of the real thing.
>
> Then when newspaper was interested in writing up story about his magical
> twisted wires, and found out that Freak did not take up the challenge,
Freak
> did his freaky thing. He "accepted" the challenge, by under his "rules".
By
> then I realized who am I dealing with and since then I enjoy occasional
comedy
> and entertainment that Freak is providing.
>
> You could go through the archives, read the "history" and get the full
story,
> but I doubt it is worth it. If you engage with him in any argument or
> discussion, you will eventually end up being threatened to be sued. We are
> trying to ingore him, maybe he will go away, but new people join here and
get
> sucked to his trolling and it takes while to realize what are they dealing
> with.
>
> The rest here are sane people, so stick around, just take the Freak for
what he
> is, have fun. You can never win with him, he is perfect, never makes
mistakes,
> always right even if wrong. What else can be said?
>
> 73 Yuri, K3BU, VE3BMV, VE1BY

1650. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:35:47 UTC
From: fractenna@aol.com
Message-ID: <20000909123547.28541.00000458@ng-cc1.aol.com>
Source record: 181167

>
>Fractenna wrote:
>>
>> I am extremely disappointed with some of the ignorance here.
>>
>> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the
>two
>> is
>>
>> 27.5 v/m / 3 v/m
>>
>> This is very close to a value of 10 and it is DIMENSIONLESS.
>>
>> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER
>ratios--BUT
>> NOT ALWAYS!
>>
>> Thus the ratio of voltages is a 10dB difference (approximate),
>>
>> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there
>is
>> approximately a 20 dB difference in POWER.
>>
>> Hope this helps. I don't want to see some youngster slinging around the
>idea
>> that 20 dB corresponds to a ratio of 10.
>>
>
>Perhaps a quote from "Reference Data For Radio Engineers", Howard Sams -
>1975 will be helpful. Under fair use:
>
>Section 3-15 Titled "Decibels and power, voltage, and current ratios"
>
>"The decibel, abbreviated dB, is a unit used to express the ratio
>between two amounts of power, P1 and P2, existing at two points. By
>definition number of dB=10 * log10(P1 / P2). It is also used to express
>voltage and current ratios: number of dB=20 * log10(V1 / V2)=20 *
>log10(I1 / I2). Strictly, it can be used to express voltage and current
>ratios only when the voltages or currents in question are measured at
>places having identical impedances."
>
>bart
>wb6hqk
>

Then you would, by definition, state that it its not relevant to compare two measurements in units of V/m --with a dB scale. Such units can never, ever, be represented as a 'power'.

The fallacy is obvious.

May I suggest that if you perceive an error in my statements that you annotate each comment and correct it accordingly.

I state categorically, that my statements on this topic are accurate.

With Best Wishes,

Chip N1IR

1651. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:40:34 UTC
From: fractenna@aol.com
Message-ID: <20000909124034.28541.00000459@ng-cc1.aol.com>
Source record: 181168

>
>Chip:
>
>Thanks for the "heads up" on the parking.
>
>Tom and I will be arriving by taxi and so don't worry about parking. We
>will call a return cab using our HT's over a local repeater.
>
>As to the exact time, we are quite flexible, I have misplaced the open house
>times, and so I would appreciate if you could please post the times for the
>open house again so that we can choose an arrival time of greatest potential
>visitor participation.
>
>Looking forward to it...
>
> Peter K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC
>--
>Fractenna <fractenna@aol.com> wrote in message
>news:20000909084037.20824.00000082@ng-fl1.aol.com...
>> >Peter O. Brackett
>> >Morrisville, NC
>> >--
>>
>> Peter--
>>
>> I do not have the time when you will be at the open house. Keep in mind
>that
>> this there will be restricted parking, and I cannot let folks in who
>aren't on
>> the list. I need to know the time to put you on the list.
>>
>> Best,
>> Chip N1IR

The time is 10-1, but I can only place you on the list.

If needed, I will ask the police to prevent stalkers and uninvited inndividuals from showing. They maintain a presence about 50 feet away in the cul de sac.

Let me know the time exactly.

73
Chip N1IR

1652. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:41:54 UTC
From: fractenna@aol.com
Message-ID: <20000909124154.28541.00000460@ng-cc1.aol.com>
Source record: 181170

>You could go through the archives, read the "history" and get the full
>story,
>but I doubt it is worth it. If you engage with him in any argument or
>discussion, you will eventually end up being threatened to be sued. We are
>trying to ingore him, maybe he will go away, but new people join here and get
>sucked to his trolling and it takes while to realize what are they dealing
>with.
>
>The rest here are sane people, so stick around, just take the Freak for what
>he
>is, have fun. You can never win with him, he is perfect, never makes
>mistakes,
>always right even if wrong. What else can be said?
>
>73 Yuri, K3BU, VE3BMV, VE1BY
>

Why not repeat it here for all to see?

73
Chip N1IR

1653. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:43:54 UTC
From: richardharrison@webtv.net
Message-ID: <29378-39BA68CA-53@storefull-112.iap.bryant.webtv.net>
Source record: 181181

Chip, N1IR wrote:
"Thus the ratio of voltages (27.5 v/m / 3 v/m) is a 10 dB difference approximately."

Maybe I need to be more succinct. This is approximately a 20 db difference because it is a voltage ratio, not a power ratio, as expressed.

The number of db`s derived from a particular ratio are, for a voltage ratio, double the number of db`s the same ratio would produce were it a power ratio.

Never mind the theory, just follow the definitions.

Best regards, Richard Harrison, KB5WZI

1654. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:48:24 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pdplkhin1@iac5.navix.net>
Source record: 181172

The chances of you ever admitting you are wrong or being humble about anything are nil! That being said I choose not to cater to your need for attention and decline further debate on the matter.

Frederic Hambrecht MSEE

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000909104912.22276.00000314@ng-cu1.aol.com...
> >Let me express this in simple terms, as the youngsters you are so concerned
> >about might get the wrong idea.
> >
> >YOU ARE WRONG!
> >
> >I would explain it to you, but feel you need to dig into the relevant
> >material. You will gain nothing if I do the work for you. If requested I
> >can return to the basics but am reluctant to do so unless you submit
> >questions via E-Mail. You must first submit a list of books you have
> >researched. Hope this helps as I would not want to see some youngster
> >slinging around the idea that you have even a remote chance of defending
> >your position.
> >
> >Frederic Hambrecht MSEE
> >--
> >
>
>
> I think that it would be very instructive for you to use some objective reason
> to show I am wrong. If so, I will publicly, profusely, and humbly apologize.
> Please: your corrections to the below.
>
> 73
> Chip N1IR
> --
> RE-POSTED:
>
> Please read my previous posts Richard. What I said, in summary ,is that dB is a

> logarithmic scale that usually refers to power. However, we are not
talking
> about powers here.
>
> We are talking about voltage densities.
>
> Thus
>
> 27.5 V/M / 3 V/M
>
> is a dimensionless ratio corresponding to about 10 dB, where the dB
refers to
> the units so used. Formerly, it's about
>
> 10 dBV/m
>
> It is impossible to get power from these measurements. They are voltage
> densities, which, by dimensional analysis can never, ever, be translated
to
> power.
>
> Thus if you formally wish to restrict the dB method to POWERS, this will
never
> apply.
>
> Of course, one may take the voltage densities and calculate them as POWER
> DENSITIES (NOT power). In this case it is perfectly legitimate to square
the
> values so stated to get a dB difference in POWER DENSITIES, which would
thus be
> about 20 dB when expressed in the proper units.
>
> With Best Wishes,
> Chip N1IR
>
>

1655. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:53:27 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pdq80$c2o$1@nntp9.atl.mindspring.net>
Source record: 181175

Chip:

Uh... police! Stalkers? What!!!

Wow, you never told us that.

Open house with police... say, you do lead an exciting life up there in Belmont, MA!

If you need police protection and expect stalkers, why on earth would you hold a publicly announced open house? You must be crazy!

You've got me worried now... I'll have to reconsider.

You seem to be enticing me to attend a potentially dangerous event. I hope you have arranged for liability insurance for that open house.

Will the police be armed? Is gunfire likely to break out? If it does, can I count on the local police for protection?

My dear wife is reading here over my shoulder and she is telling me in no uncertain terms that she absolutely forbids me to attend your fractal antenna open house event, she says if it is so dangerous that you need police protection, I am to stay away.

Is there anything that you can tell the NG to asuage my wife's feelings of dread and doom about your fractal antenna open house?

Tom, if you are reading the mail, I'm calling the trip off, I have to be at the DSLcon conference in downtown Boston on the following Monday but, unless I get absolute assurances of my safety at the Cohen "Ponderossa", I won't be attending the Saturday open house.

Maybe I can get Chip to invite us to a "private showing" rather than attending a "risky" open house.

Chip, what say, can Tom and I come for a private showing, say on Sunday?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909124034.28541.00000459@ng-cc1.aol.com...
> >
> >Chip:
> >

> >Thanks for the "heads up" on the parking.
> >
> >Tom and I will be arriving by taxi and so don't worry about parking. We
> >will call a return cab using our HT's over a local repeater.
> >
> >As to the exact time, we are quite flexible, I have misplaced the open
house
> >times, and so I would appreciate if you could please post the times for
the
> >open house again so that we can choose an arrival time of greatest
potential
> >visitor participation.
> >
> >Looking forward to it...
> >
> > Peter K1PO
> >
> >--
> >Peter O. Brackett
> >Morrisville, NC
> >--
> >Fractenna <fractenna@aol.com> wrote in message
> >news:20000909084037.20824.00000082@ng-fl1.aol.com...
> >> >Peter O. Brackett
> >> >Morrisville, NC
> >> >--
> >>
> >> Peter--
> >>
> >> I do not have the time when you will be at the open house. Keep in mind
> >that
> >> this there will be restricted parking, and I cannot let folks in who
> >aren't on
> >> the list. I need to know the time to put you on the list.
> >>
> >> Best,
> >> Chip N1IR
>
> The time is 10-1, but I can only place you on the list.
>
> If needed, I will ask the police to prevent stalkers and uninvited
inndividuals
> from showing. They maintain a presence about 50 feet away in the cul de
sac.
>
> Let me know the time exactly.
>
> 73
> Chip N1IR

1656. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:53:31 UTC
From: fractenna@aol.com
Message-ID: <20000909125331.28559.00000531@ng-cc1.aol.com>
Source record: 181173

>The chances of you ever admitting you are wrong or being humble about
>anything are nil! That being said I choose not to cater to your need for
>attention and decline further debate on the matter.
>
>Frederic Hambrecht MSEE
>
>--
>
>Fred W4JLE
>http://w4jle.com/
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000909104912.22276.00000314@ng-cu1.aol.com...
>> >Let me express this in simple terms, as the youngsters you are so
>concerned
>> >about might get the wrong idea.
>> >
>> >YOU ARE WRONG!
>> >
>> >I would explain it to you, but feel you need to dig into the relevant
>> >material. You will gain nothing if I do the work for you. If requested I
>> >can return to the basics but am reluctant to do so unless you submit
>> >questions via E-Mail. You must first submit a list of books you have
>> >researched. Hope this helps as I would not want to see some youngster
>> >slinging around the idea that you have even a remote chance of defending
>> >your position.
>> >
>> >Frederic Hambrecht MSEE
>> >--
>> >
>>
>>
>> I think that it would be very instructive for you to use some objective
>reason
>> to show I am wrong. If so, I will publicly, profusely, and humbly
>apologize.
>> Please: your corrections to the below.
>>
>> 73
>> Chip N1IR
>> --
>> RE-POSTED:
>>
>> Please read my previous posts Richard. What I said, in summary ,is that dB

>is a
>> logarithmic scale that usually refers to power. However, we are not
>talking
>> about powers here.
>>
>> We are talking about voltage densities.
>>
>> Thus
>>
>> 27.5 V/M / 3 V/M
>>
>> is a dimensionless ratio corresponding to about 10 dB, where the dB
>refers to
>> the units so used. Formerly, it's about
>>
>> 10 dBV/m
>>
>> It is impossible to get power from these measurements. They are voltage
>> densities, which, by dimensional analysis can never, ever, be translated
>to
>> power.
>>
>> Thus if you formally wish to restrict the dB method to POWERS, this will
>never
>> apply.
>>
>> Of course, one may take the voltage densities and calculate them as POWER
>> DENSITIES (NOT power). In this case it is perfectly legitimate to square
>the
>> values so stated to get a dB difference in POWER DENSITIES, which would
>thus be
>> about 20 dB when expressed in the proper units.
>>
>> With Best Wishes,
>> Chip N1IR
>>
>>

Then we have a subjective and incorrect assertion as opposed to something accurate and demonstrated--at least from you.

I do care for the truth. If I am not stating the truth then you have an obligation to follow through, given this is a public and global forum.

Tell you what: IF I am wrong, then I will resign my teaching position effective immediately, as according to you, I am incapable of conveying accurate and fundamental info.

The truth is ALWAYS worth serious stakes.

Hope you objective follow through.

With best Wishes,
Chip N1IR

1657. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:55:45 UTC
From: fractenna@aol.com
Message-ID: <20000909125545.28559.00000532@ng-cc1.aol.com>
Source record: 181174

>Chip, N1IR wrote:
>"It is impossible to get power from these measurements."
>
>It is possible, I believe, to infer power from these measurements. If
>not, I don`t know what i`m missing.
>
>A radiated power expands producing a density which declines in watts per
>square meter in the wavefront as it expands throughout space. The same
>total power is in the wavefront at any distance from the sender minus
>other losses which may be encountered enroute.
>
>The volts per meter are representative of the power in a square meter of
>the wavefront.
>
>Best regards, Richard Harrison, KB5WZI
>

That is still correct Richard. Please R E A D my posts:-)

You can never get units of WATTS from the dimensions of V/M without invoking an additional, dimensioned quantity--which is not part of this measurement.

73
Chip N1IR

1658. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 16:59:47 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba6715.26084607@news.akorn.net>
Source record: 181176

On 09 Sep 2000 14:49:12 GMT, fractenna@aol.com (Fractenna) wrote:

>I think that it would be very instructive for you to use some objective reason
>to show I am wrong. If so, I will publicly, profusely, and humbly apologize.
>Please: your corrections to the below.
>
>73
>Chip N1IR

Chippy,

Only by accepting our mistakes and correcting them do we advance.

If you ever admitted you were wrong, or even quietly accepted the fact
you were wrong and moved on, my opinion of you would increase by 100
dB (that is in either voltage or current ratio...or power).

As it is, you could have 1/4 the IQ you have and advance 50 times
faster if you didn't have your head so firmly stuck up your ass you
can't see daylight in the noontime sun!

How on earth does an absolute moron like you get a PhD? By irritating
people so much they give you a degree just to get you the hell away
from them?

73, Tom

1659. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:03:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba6d06.27605987@news.akorn.net>
Source record: 181177

On 09 Sep 2000 12:42:01 GMT, fractenna@aol.com (Fractenna) wrote:

>>> Rick: I swim 2 km in 30 minutes every morning in the ocean but certainly
>>> wouldn't recommend that rigorous of a workout to the population in
>>> general. That each of us are able to withstand what we subject our
>>> bodies to must mean we're both freaks of Nature, eh? =:o
>>>
>>> 73, Jeff KH6O
>
>Well I;m jealous:-)! Which island?
>
>73
>Chip N1IR

Chippy, You need to go to Walrus Island. You will look less out of
place.

73 Tom

1660. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:09:14 UTC
From: k1bqt@aol.com
Message-ID: <20000909130914.28616.00000458@ng-cc1.aol.com>
Source record: 181178

Hi Ed-

Having put in some time defending Dave's right to free speech, I have no problem with him exercising it.

What I do have a problem with is when an individual's "suggestion" is driven by special interests and takes on the form of "mock rulemaking" in an approval process by a board possessing no regulartory authority whatsoever. This may confuse some amateurs. Fact is, bandplans don't carry the weight of the paper their written on.

FCC Rules, on the otherhand, do. If there was a CW/Digital segment designated on the low end of 160 by FCC Ruling, for example, swarms of contest whackos on SSB wouldn't be driving everyone else off that portion of the band at their whim.

Only one captain gets to drive the ship. Technically, shouldn't anyone who demands you to move because of a bandplan be turned into the FCC for willful interference? Legally, that's what it is--and the League encourages it!

Rick K1BQT

1661. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:15:16 UTC
From: fractenna@aol.com
Message-ID: <20000909131516.18404.00000360@ng-fm1.aol.com>
Source record: 181179

>
>Chip:
>
>Uh... police! Stalkers? What!!!
>
>Wow, you never told us that.
>
>Open house with police... say, you do lead an exciting life up there in
>Belmont, MA!
>
>If you need police protection and expect stalkers, why on earth would you
>hold a publicly announced open house? You must be crazy!
>
>You've got me worried now... I'll have to reconsider.
>
>You seem to be enticing me to attend a potentially dangerous event. I hope
>you have arranged for liability insurance for that open house.
>
>Will the police be armed? Is gunfire likely to break out? If it does, can
>I count on the local police for protection?
>
>My dear wife is reading here over my shoulder and she is telling me in no
>uncertain terms that she absolutely forbids me to attend your fractal
>antenna open house event, she says if it is so dangerous that you need
>police protection, I am to stay away.
>
>Is there anything that you can tell the NG to asuage my wife's feelings of
>dread and doom about your fractal antenna open house?
>
>Tom, if you are reading the mail, I'm calling the trip off, I have to be at
>the DSLcon conference in downtown Boston on the following Monday but, unless
>I get absolute assurances of my safety at the Cohen "Ponderossa", I won't be
>attending the Saturday open house.
>
>Maybe I can get Chip to invite us to a "private showing" rather than
>attending a "risky" open house.
>
>Chip, what say, can Tom and I come for a private showing, say on Sunday?
>
> Peter K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC

>--
>Fractenna <fractenna@aol.com> wrote in message
>news:20000909124034.28541.00000459@ng-cc1.aol.com...
>> >
>> >Chip:
>> >
>> >Thanks for the "heads up" on the parking.
>> >
>> >Tom and I will be arriving by taxi and so don't worry about parking. We
>> >will call a return cab using our HT's over a local repeater.
>> >
>> >As to the exact time, we are quite flexible, I have misplaced the open
>house
>> >times, and so I would appreciate if you could please post the times for
>the
>> >open house again so that we can choose an arrival time of greatest
>potential
>> >visitor participation.
>> >
>> >Looking forward to it...
>> >
>> > Peter K1PO
>> >
>> >--
>> >Peter O. Brackett
>> >Morrisville, NC
>> >--
>> >Fractenna <fractenna@aol.com> wrote in message
>> >news:20000909084037.20824.00000082@ng-fl1.aol.com...
>> >> >Peter O. Brackett
>> >> >Morrisville, NC
>> >> >--
>> >>
>> >> Peter--
>> >>
>> >> I do not have the time when you will be at the open house. Keep in mind
>> >that
>> >> this there will be restricted parking, and I cannot let folks in who
>> >aren't on
>> >> the list. I need to know the time to put you on the list.
>> >>
>> >> Best,
>> >> Chip N1IR
>>
>> The time is 10-1, but I can only place you on the list.
>>
>> If needed, I will ask the police to prevent stalkers and uninvited
>inndividuals
>> from showing. They maintain a presence about 50 feet away in the cul de
>sac.

>>
>> Let me know the time exactly.
>>
>> 73
>> Chip N1IR

I cannot guarantee your safety, but since the list of people will be controlled, it is unlikely that any violence will occur. I can guarantee that , as the host, no one helping with the open house will be anything but accomodating and gracious.

Please let me know what time you will be here so I can put you on the list for the open house.

73
Chip N1IR

1662. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:16:50 UTC
From: 2w8ji@contesting.com
Message-ID: <39ba6d54.27683442@news.akorn.net>
Source record: 181180

On 09 Sep 2000 15:27:13 GMT, w1rfi@aol.com (W1RFI) wrote:

>On what basis would you offer that Dave should not be permitted to make
>suggestions to the amateur community?
>
>73,
>Ed Hare, W1RFI

Hi Ed,

Maybe someday Rick will learn to speak his mind!

I think the problem is many people view the ARRL as a politcal organization designed to serve itself, rather than serving the amateur community.

Sort of like a minature Congress or Senate, with a lifetime president, making decisions based on sustaining employment rather than whats good for amateur radio in the long term.

I can understand that view, looking at all the decisions I've seen in policy. You don't need to answer, I'm just trying to convey what I think Rick was saying in different words.

73 Tom

1663. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:41:50 UTC
From: w1rfi@aol.com
Message-ID: <20000909134150.18398.00000377@ng-fm1.aol.com>
Source record: 181182

>From: fractenna@aol.com (Fractenna)

>Then you would, by definition, state that it its not relevant to compare two
>measurements in units of V/m --with a dB scale. Such units can never, ever,
>be represented as a 'power'.

That is not correct, Chip. The units of V/distance and A/distance in representing fields are related to (power/(distance^2) by virtue of the impedance of free space (377 ohms). So an electric field of 1V/m has an implicit relationship to power because by defintion, a field is occuring in a free space impedance of 377 ohms.

To convert V/m to power density, use (V^2/377)/m^2. Because the impedance is identical in comparing 3 V/m and 27V/m as it relates to radiated fields from an antenna, it is perfectly valid to use the formula 20*log(V1/V2) to obtain the difference between the two units in dB.

The ONLY definitions I have ever seen relating to the bel, the basic unit behind the decibel, state that it the log10 of the ratio of two powers. I have never seen it applied to anything else in any text book ever. Can you supply any reference that indicats that the bel is a ratio of pure numbers? the log10 function is very much a ratio of pure numbers, although log((X/n)/(Y/n)) is a perfectly valid operation for which the n's cancel out. But by defining the bel as a ratio of two powers, then one can use log(P1/P2) for power and one can ONLY use log(V1/V2) if V1 and V2 are both in the same impedance. In the case of radiated fields, they are.

I do not believe the bel could be applied to pure numbers, because if it were, then 10*log ((1/1)/(1/1)) would be = 20*log((1/1)/(1/1)) if in the first case, we were discussing pure numbers and in the second case, we were discussing those same numbers representing voltages measured in a circuit of 1 ohm.

With the definition that bel = log(P1/P2) and bel = 2log(E1/E2) then normalizing R to 1 ohm, then bel = log(E1^2/E2^2) - 2log(E1/E2).

73,
Ed Hare, W1RFI

1664. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:45:32 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <svsdp8.f2b.ln@mail.specsol.com>
Source record: 181187

Fractenna <fractenna@aol.com> wrote:
>>
>>Fractenna wrote:
>>>
>>> I am extremely disappointed with some of the ignorance here.
>>>
>>> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the
>>two
>>> is
>>>
>>> 27.5 v/m / 3 v/m
>>>
>>> This is very close to a value of 10 and it is DIMENSIONLESS.
>>>
>>> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER
>>ratios--BUT
>>> NOT ALWAYS!
>>>
>>> Thus the ratio of voltages is a 10dB difference (approximate),
>>>
>>> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there
>>is
>>> approximately a 20 dB difference in POWER.
>>>
>>> Hope this helps. I don't want to see some youngster slinging around the
>>idea
>>> that 20 dB corresponds to a ratio of 10.
>>>
>>
>>Perhaps a quote from "Reference Data For Radio Engineers", Howard Sams -
>>1975 will be helpful. Under fair use:
>>
>>Section 3-15 Titled "Decibels and power, voltage, and current ratios"
>>
>>"The decibel, abbreviated dB, is a unit used to express the ratio
>>between two amounts of power, P1 and P2, existing at two points. By
>>definition number of dB=10 * log10(P1 / P2). It is also used to express
>>voltage and current ratios: number of dB=20 * log10(V1 / V2)=20 *
>>log10(I1 / I2). Strictly, it can be used to express voltage and current
>>ratios only when the voltages or currents in question are measured at
>>places having identical impedances."
>>
>>bart
>>wb6hqk

>>

> Then you would, by definition, state that it its not relevant to compare two
> measurements in units of V/m --with a dB scale. Such units can never, ever, be
> represented as a 'power'.

> The fallacy is obvious.

> May I suggest that if you perceive an error in my statements that you annotate
> each comment and correct it accordingly.

> I state categorically, that my statements on this topic are accurate.

> With Best Wishes,

> Chip N1IR

It is quite relevent to compare ANY two measurements (in the same units) and
give the ratio as dB. It is also common engineering practice.

Expressing ratio in terms of dB does NOT imply you are comparing power.

One does need to take care to apply the correct multiplier, i.e. 20, if the
base unit is Volts, as in V/m.

No one but the estimated scientwist of the group is saying that the unit
V/m is a unit of power.

Since the Chip arguement is so totally clueless, I have come to the
conclusion he is argueing simply for the sake of attention again.

Chip reminds me a lot of a guy I knew in the Army who would make the most
outrageous, obviously incorrect statements just to see who would rise to
the bait. And, suckers that we are, we responded to Chip's silly post.

Jim Pennino

1665. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:45:52 UTC
From: k1bqt@aol.com
Message-ID: <20000909134552.16898.00000443@ng-fl1.aol.com>
Source record: 181183

>Then you would, by definition, state that it its not relevant to compare two measurements in units of V/m --with a dB scale. Such units can never, ever, be represented as a 'power'.<

Awww Shit!!! That means any dB comparrisons or dBm readings taken with my little MFJ-224 meters are totally bogus! Thank god I left THAT company before they found out what I've did!

Rick K1BQT

PS (Mary's a EE, ask her)

1666. Re: LAST MINUTES FA MFJ259-B+ACC.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:47:20 UTC
From: "R.L. Bo Thompson" <kb5cng@amsat.org>
Message-ID: <8pdt41ale1@ionews.ionet.net>
Source record: 181185
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Oh Goodie!! Now maybe the spam will stop.

Bo
--
R. L. "Bo" Thompson, KB5CNG <kb5cng@amsat.org>

1667. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:50:39 UTC
From: w1rfi@aol.com
Message-ID: <20000909135039.07098.00000002@ng-fm1.aol.com>
Source record: 181184

>From: richardharrison@webtv.net (Richard Harrison)

>It is possible, I believe, to infer power from these measurements. If
>not, I don`t know what i`m missing.

For a field of E/m, the plane-wave equivalent power density is equal to:

pd(W/m^2) = (E^2/377)/m^2

73,
Ed Hare, W1RFI

1668. CLAASICS FACTORY

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 17:51:25 UTC
From: Sample Whore <sampecd@hotmail.com>
Message-ID: <8pdtj7eoo5@spectra.a2000.nl>
Source record: 181186
Cross-posted to: rec.ham-radio.packet,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dear reader,
Checkout our classics factory show on www.dancenet.fm every saturday 17.00 CET. If you can't listen at that time no problem, the show will repeated on the sunday after

Saturday the 16th of spetember we have a special item around Ben Liebrand, the remix master himself. Including an inteview and one of his famous minimixes, and his personal top 5.

Tune in to www.dancenet.fm the number 1 cyber dance station.

1669. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:02:25 UTC
From: richardharrison@webtv.net
Message-ID: <29378-39BA7B31-57@storefull-112.iap.bryant.webtv.net>
Source record: 181189

Chip N1IR wrote:
"You can never get units of WATTS from the dimensions of V/M without invoking an additional dimensioned quantity."

We trust that in a resistance of ANY type the current will be proportional to the voltage, Ohms law will apply, and the power is the voltage squared divided by the resistance.

We have a 377 ohm value for free space. (Maybe I should refer to a book, but I`m not designing a jet aircraft so I don`t absolutely have to be right on this.)

Best regards, Richard Harrison, KB5WZI

1670. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:04:00 UTC
From: kleinNOSPAM@gilhousen.com
Message-ID: <39bb76e7.75399869@news>
Source record: 181188

The decibel is defined as a power ratio in the references I have handy. Interestingly, the definition of decibel is not even mentioned in all my antenna reference works - I guess it's considered a high school physics thing (that's where I learned this.)

So, for the benefit of any wandering innocents who have blundered into this silly discussion and are being confused by some of the arguments, the book "Reference Data for Engineers: Radio, Electronics, Computer, and Communications", Edward C. Jordan, Editor in Chief, 7th edition, Sams, 1991, defines it thusly:

"The decibel, symbol dB, is a dimensionless unit for representing the ratio of two values of power. The number, n, of decibels is 10 times the logarithm to the base 10 of the power ratio:
n(dB) = 10 log10 (P2/P1)
In the electral case of voltage, V, Current, I, and impedance, Z (when Z is a pure resistance):
P2/P1 = (V2/V1)^2 (Z1/Z2) = I2/I1)^2 (Z2/Z1)
Thus,
nV(dB) = 20log10(V2/V1) + 10log10(Z1/Z2) and
nI(dB) = 20log10(I2/I1) + 10log10(Z1/Z2)
Only in the special case of matched impedances (Z2=Z1) does
n=n(z-matched) = 20log10(V2/V1) = 20log10(I2/I1)."

My unabridged dictionary also says that the decibel is a way of expressing power ratios.

Note also that a ratio of any like quantities will always be unitless.

Note also that starting with defining the decibel as a power ratio leads one to immediately see that by Ohm's Law, the value of power can have E^/Z or I^2/Z substituted for P in the ratio. And if it is understood that a situation of equal impedance is being considered, that it is quite correct to use 20log(E2/E1) to calculate the decibel power ratio. Frankly, I don't see how a 10log(E2/E1) situation could EVER happen. Maybe for deciCohens but not for deciBels.

Klein Gilhousen, WT6G

1671. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:37:47 UTC
From: richardharrison@webtv.net
Message-ID: <29380-39BA837B-4@storefull-112.iap.bryant.webtv.net>
Source record: 181194

Ed Hare, W1RFI wrote:
" pd (W/m^2) = (E^2/377) m^2 "

Yes. In an earlier posting I wrote:"---producing 0.1 v/m at two miles and 26.5 microwatts---

01 / 377 = 26.5 microwatts. That 377 was the resistance (non-dissipative) that I was using in my example.

Best regards, Richard Harrison, KB5WZI

1672. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:41:30 UTC
From: w1rfi@aol.com
Message-ID: <20000909144130.21319.00000399@ng-fy1.aol.com>
Source record: 181190

>From: 2w8ji@contesting.com (Tom W8JI)

>Ten dB isn't much if you only plan on working stations that are
>strong, but even 1 dB can make or break a signal under less than good
>conditions.

I agree. I can think of a number of cases where that applies. In the QRP world, I have more than once spent some trying to dig a fellow QRPer out of the noise. One dB can make a difference between just being able to tell someone is there, but not being able to extract the call signs or just being able to tell someone is there and completing a QSO. Ditto on some of the CW work I have done on VHF.

Big gun contesters know that every dB is important, both to just edge out the other guy in a pileup if you can, but in keeping the rate up in getting answers to CQs. There are a number of people who only answer the louder stations, and every dB can help.

>I think part of the misconception that 5 or 10 dB is not important
>comes from looking at S meters, and assuming they are 6 dB per S unit
>across the scale.

In QRP work, contests, pileup busting, etc., 5-10 dB can make all the difference in the world, I would guess about 20% of the time. In a single QSO, the difference between 20 dB over 9 and 30 dB over 9 will not usually make a shred of difference.

>It takes very little work to move a vertical from a 5 or 10%
>efficiency radiator, which it will be with a single radial laid on the
>ground or just above ground, to one that is 50% or higher efficiency.

Now, are you talking voltage efficiency or power efficiency? :-)

73,
Ed Hare, W1RFI

1673. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:44:19 UTC
From: fractenna@aol.com
Message-ID: <20000909144419.15773.00000409@ng-cd1.aol.com>
Source record: 181191

>>From: fractenna@aol.com (Fractenna)
>
>>Then you would, by definition, state that it its not relevant to compare
>two
>>measurements in units of V/m --with a dB scale. Such units can never, ever,
>>be represented as a 'power'.
>
>That is not correct, Chip. The units of V/distance and A/distance in
>representing fields are related to (power/(distance^2) by virtue of the
>impedance of free space (377 ohms). So an electric field of 1V/m has an
>implicit relationship to power because by defintion, a field is occuring in a
>free space impedance of 377 ohms.
>
>To convert V/m to power density, use (V^2/377)/m^2. Because the impedance is
>identical in comparing 3 V/m and 27V/m as it relates to radiated fields from
>an
>antenna, it is perfectly valid to use the formula 20*log(V1/V2) to obtain the
>difference between the two units in dB.
>
>The ONLY definitions I have ever seen relating to the bel, the basic unit
>behind the decibel, state that it the log10 of the ratio of two powers. I
>have
>never seen it applied to anything else in any text book ever. Can you supply
>any reference that indicats that the bel is a ratio of pure numbers? the
>log10
>function is very much a ratio of pure numbers, although log((X/n)/(Y/n)) is a
>perfectly valid operation for which the n's cancel out. But by defining the
>bel as a ratio of two powers, then one can use log(P1/P2) for power and one
>can
>ONLY use log(V1/V2) if V1 and V2 are both in the same impedance. In the case
>of radiated fields, they are.
>
>I do not believe the bel could be applied to pure numbers, because if it
>were,
>then 10*log ((1/1)/(1/1)) would be = 20*log((1/1)/(1/1)) if in the first
>case,
>we were discussing pure numbers and in the second case, we were discussing
>those same numbers representing voltages measured in a circuit of 1 ohm.
>
>With the definition that bel = log(P1/P2) and bel = 2log(E1/E2) then
>normalizing R to 1 ohm, then bel = log(E1^2/E2^2) - 2log(E1/E2).
>
>73,
>Ed Hare, W1RFI

I guess I could be upset that people don't read, but I will attempt to be amused.

I repeat: a measurement in V/m can NEVER EVER be converted into a power.

Most freshman (science, engineering) freshman in college learn this in their chemistry classes, where profs are especially unforgiving about conversion of units and dimensional analysis. Less so in intro physics. Usually reasonably 'hand waving' in engineering:-)

73
Chip N1IR

1674. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:46:30 UTC
From: fractenna@aol.com
Message-ID: <20000909144630.15773.00000410@ng-cd1.aol.com>
Source record: 181192

>>Then you would, by definition, state that it its not relevant to compare
>two
>measurements in units of V/m --with a dB scale. Such units can never, ever,
>be
>represented as a 'power'.<
>
>Awww Shit!!! That means any dB comparrisons or dBm readings taken with my
>little MFJ-224 meters are totally bogus! Thank god I left THAT company
>before
>they found out what I've did!
>
>Rick K1BQT
>
>PS (Mary's a EE, ask her)
>

C'mon Rick; please don't go into swear mode.

Yup; Mary is an engineer--but she's a Chem E. She sure pays attention to those units and dimensional analysis!

I didn't need to convince her that a measurement in volts/meter can't be converted into a power!

73
Chip N1IR

1675. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:46:30 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <aAvu5.163460$c5.4209845@news2.rdc1.on.home.com>
Source record: 181193

alex <A_L_E_X1@yahoo.com> wrote in message
news:968470716.729360@nomad.vif.com...
> Hi, All!!!
> I've readed alot from these postings, but i can't find the answer to my
> question. How to build a UHF-VHF antenna, maybe you know a web-site with
all
> the sizes and parameters of antennas, or maybe you can explain it here?
>
> If it's important, I live in Canada, Quebec, Montreal.
>
> Waiting for reply!!!

You could try building the Arrow J-Pole. It is dual band, single feed point,
and works great. I have built a couple and have had great success. I will
send you the plans if you wish.

Barry D.

1676. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:50:12 UTC
From: fractenna@aol.com
Message-ID: <20000909145012.15773.00000411@ng-cd1.aol.com>
Source record: 181195

>Fractenna <fractenna@aol.com> wrote:
>>>
>>>Fractenna wrote:
>>>>
>>>> I am extremely disappointed with some of the ignorance here.
>>>>
>>>> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of
>the
>>>two
>>>> is
>>>>
>>>> 27.5 v/m / 3 v/m
>>>>
>>>> This is very close to a value of 10 and it is DIMENSIONLESS.
>>>>
>>>> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER
>>>ratios--BUT
>>>> NOT ALWAYS!
>>>>
>>>> Thus the ratio of voltages is a 10dB difference (approximate),
>>>>
>>>> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and
>there
>>>is
>>>> approximately a 20 dB difference in POWER.
>>>>
>>>> Hope this helps. I don't want to see some youngster slinging around the
>>>idea
>>>> that 20 dB corresponds to a ratio of 10.
>>>>
>>>
>>>Perhaps a quote from "Reference Data For Radio Engineers", Howard Sams -
>>>1975 will be helpful. Under fair use:
>>>
>>>Section 3-15 Titled "Decibels and power, voltage, and current ratios"
>>>
>>>"The decibel, abbreviated dB, is a unit used to express the ratio
>>>between two amounts of power, P1 and P2, existing at two points. By
>>>definition number of dB=10 * log10(P1 / P2). It is also used to express
>>>voltage and current ratios: number of dB=20 * log10(V1 / V2)=20 *
>>>log10(I1 / I2). Strictly, it can be used to express voltage and current
>>>ratios only when the voltages or currents in question are measured at
>>>places having identical impedances."
>>>

>>>bart
>>>wb6hqk
>>>
>
>> Then you would, by definition, state that it its not relevant to compare
>two
>> measurements in units of V/m --with a dB scale. Such units can never, ever,
>be
>> represented as a 'power'.
>
>> The fallacy is obvious.
>
>> May I suggest that if you perceive an error in my statements that you
>annotate
>> each comment and correct it accordingly.
>
>> I state categorically, that my statements on this topic are accurate.
>
>> With Best Wishes,
>
>> Chip N1IR
>
>It is quite relevent to compare ANY two measurements (in the same units) and
>give the ratio as dB. It is also common engineering practice.
>
>Expressing ratio in terms of dB does NOT imply you are comparing power.
>
>One does need to take care to apply the correct multiplier, i.e. 20, if the
>base unit is Volts, as in V/m.
>
>No one but the estimated scientwist of the group is saying that the unit
>V/m is a unit of power.
>
>Since the Chip arguement is so totally clueless, I have come to the
>conclusion he is argueing simply for the sake of attention again.
>
>Chip reminds me a lot of a guy I knew in the Army who would make the most
>outrageous, obviously incorrect statements just to see who would rise to
>the bait. And, suckers that we are, we responded to Chip's silly post.
>
>Jim Pennino
>

If stating the truth puts me in the most 'outrageous' category, then please
keep in at the top of your list!

It's really amazing that Ed and others INSIST that you can get power from a
measurement of V/m.

I am a bit taken aback when Ed says how wrong I am--that you CAN get POWER--and
then in the next sentence calls it a POWER DENSITY.

The two are hardly the same. You cannot get the power from the power density measurement. More info is needed. Just use dimensional analysis to balance it out and figure what is 'missing'--even though the answer is obvious.

73
Chip N1IR

1677. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:51:27 UTC
From: fractenna@aol.com
Message-ID: <20000909145127.15773.00000413@ng-cd1.aol.com>
Source record: 181196

>>From: richardharrison@webtv.net (Richard Harrison)
>
>>It is possible, I believe, to infer power from these measurements. If
>>not, I don`t know what i`m missing.
>
>For a field of E/m, the plane-wave equivalent power density is equal to:
>
>pd(W/m^2) = (E^2/377)/m^2
>
>73,
>Ed Hare, W1RFI
>

Thanks for FINALLY agreeing Ed!

Power density is NOT power. Power cannot be extracted directly from the v/m measurement. More info is needed.

73
Chip N1IR

1678. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:55:10 UTC
From: alex <A_L_E_X1@yahoo.com>
Message-ID: <968514975.251187@nomad.vif.com>
Source record: 181161

Thenx 4 ya all that helped me (it was very fast, i've posted in 23.37 and had the first answer at 4.48)

"AC6V" <ac6v@ix.netcom.com> wrote in message news:39BA3844.C80C911A@ix.netcom.com...
> alex wrote:
>
> > Hi, All!!!
> > I've readed alot from these postings, but i can't find the answer to my
> > question. How to build a UHF-VHF antenna, maybe you know a web-site with all
> > the sizes and parameters of antennas, or maybe you can explain it here?
> >
> > If it's important, I live in Canada, Quebec, Montreal.
> >
> > Waiting for reply!!!
>
> ======
> Hello Alex -- try HOMEBREW ANTENNAS LINKS at URL:
> http://ac6v.com/pageant.html
>
>
> --
> 73 From Rod In Oceanside, CA
> Amateur Radio & DX Reference Guide
> Featuring 100+ Pages, 750 Indexed Topics & 6000 Links
> http://ac6v.com/
> Over 770,000 Hits On The Counter
>
>

1679. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:57:48 UTC
From: fractenna@aol.com
Message-ID: <20000909145748.15773.00000414@ng-cd1.aol.com>
Source record: 181197

>
>The decibel is defined as a power ratio in the references I have
>handy. Interestingly, the definition of decibel is not even mentioned
>in all my antenna reference works - I guess it's considered a high
>school physics thing (that's where I learned this.)
>
>So, for the benefit of any wandering innocents who have blundered into
>this silly discussion and are being confused by some of the arguments,
>the book "Reference Data for Engineers: Radio, Electronics, Computer,
>and Communications", Edward C. Jordan, Editor in Chief, 7th edition,
>Sams, 1991, defines it thusly:
>
>"The decibel, symbol dB, is a dimensionless unit for representing the
>ratio of two values of power. The number, n, of decibels is 10 times
>the logarithm to the base 10 of the power ratio:
> n(dB) = 10 log10 (P2/P1)
>In the electral case of voltage, V, Current, I, and impedance, Z (when
>Z is a pure resistance):
> P2/P1 = (V2/V1)^2 (Z1/Z2) = I2/I1)^2 (Z2/Z1)
>Thus,
> nV(dB) = 20log10(V2/V1) + 10log10(Z1/Z2) and
> nI(dB) = 20log10(I2/I1) + 10log10(Z1/Z2)
>Only in the special case of matched impedances (Z2=Z1) does
> n=n(z-matched) = 20log10(V2/V1) = 20log10(I2/I1)."
>
>My unabridged dictionary also says that the decibel is a way of
>expressing power ratios.
>
>Note also that a ratio of any like quantities will always be unitless.
>
>
>Note also that starting with defining the decibel as a power ratio
>leads one to immediately see that by Ohm's Law, the value of power can
>have E^/Z or I^2/Z substituted for P in the ratio. And if it is
>understood that a situation of equal impedance is being considered,
>that it is quite correct to use 20log(E2/E1) to calculate the decibel
>power ratio. Frankly, I don't see how a 10log(E2/E1) situation could
>EVER happen. Maybe for deciCohens but not for deciBels.
>
>Klein Gilhousen, WT6G
>

Hello Klein--

Please follow my posts.

dB is not exclusively used to describe powers (which I already said).

But let's take, for the moment, the original post from W1RFI:

>The levels in various immunity standards are approximately 3 V/m. The levels
>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>correlate RFI and RFX issues with 20 dB of difference between the two.
>
>73,
>Ed Hare, W1RFI

Since neither measurement gives POWER, your definition would require that dB is not an acceptable means of description.

In fact, dB is used for purposes other than describing power. In this case, there is the almost 10dB difference in v/m. From this ONE CAN GET THE POWER DENSITY which is about 20dB..you figure out the units:-) It ain't watts!

But I said all this already:-)

Dimensional analysis lives:-)!

73
Chip N1IR

1680. Re: All the infighting: a perspective...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 18:59:07 UTC
From: fractenna@aol.com
Message-ID: <20000909145907.15773.00000415@ng-cd1.aol.com>
Source record: 181198

```
>
>
> 09 Sep 2000 13:57:16 GMT dans l'article
> <20000909095716.15731.00000318@ng-cd1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>> > l'honorable Fractenna <fractenna@aol.com> escrivit :
>> >
>> >> I have it up as a background window. Every once and a while, I will
>> >respond to
>> >> a post. I read fast,. type fast, and shit 'on my feet',
>> >
>>
>> I never, ever, ever, said this --nor do I use such vulgar descriptions on
>this
>> NG. Never ever. This is a fraudulent post which has nothing to do with me.
>
>Have a look for yourself:
>
><20000731201924.03482.00000283@ng-cb1.aol.com>
>
>Note that sometimes my news server is wrong by 3 or 4 letters.
>
>--
>Gilbert.
>

I have never ever used that word on this NG. Never ever. Your bogus
representation deliberately does me a disservice. It is a FRAUDULENT copy of my
post.

NC
```

1681. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:04:12 UTC
From: fractenna@aol.com
Message-ID: <20000909150412.15773.00000416@ng-cd1.aol.com>
Source record: 181199

>
>Chip N1IR wrote:
>"You can never get units of WATTS from the dimensions of V/M without
>invoking an additional dimensioned quantity."
>
>We trust that in a resistance of ANY type the current will be
>proportional to the voltage, Ohms law will apply, and the power is the
>voltage squared divided by the resistance.
>
>We have a 377 ohm value for free space. (Maybe I should refer to a book,
>but I`m not designing a jet aircraft so I don`t absolutely have to be
>right on this.)
>
>Best regards, Richard Harrison, KB5WZI
>
>

I will say it again. You CANNOT convert a measurement in V/m into a POWER.
You CAN convert into a POWER DENSITY.

More info is needed for POWER.

If what everyone insists is that it's ok to be sloppy between a 'power density'
and a 'power' ...uh uh. that's a no no. You will never ever convince me for the
simple reason that it is not tenable.

Regards,

NC

73
Chip N1IR

1682. FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:29:13 UTC
From: fractenna@aol.com
Message-ID: <20000909152913.05086.00000195@ng-cd1.aol.com>
Source record: 181200

Fun!

Just worked country 310 on 10M with the 10M fractal quad yagi (see:

http://www.fractenna.com/ham/hampage1.html

8Q7XX, first call!

73,
Chip N1IR

1683. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:31:17 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39BA9005.6324B4B8@mwci.net>
Source record: 181201

Richard Harrison wrote:

> We trust that in a resistance of ANY type the current will be
> proportional to the voltage, Ohms law will apply, and the power is the
> voltage squared divided by the resistance.

Page 17.1 of the 1995-2000 ARRL Handbook (I wrote it) has a discussion of this subject. It goes like this.

Consider two resistors R1 and R2 with voltages V1 and V2. The power ratio is:

Ratio = V2^2/R2 divided by V1^2/R1. The dB *difference* is 10 log(Ratio).

If (and only if) R1 = R2 then the dB difference is 20 log(V2/V1). This applies also in space (377 ohms) for the far field. This is easily derived from the algebra of logarithms.

Both of these satisfy the formal definition of dB.

But there is another usage that is strictly speaking not rigorous, but is widely accepted in practice. It is "inherited" from the vacuum tube days, when we used a VTVM or a high impedance spectrum analyzer probe to trouble shoot by comparing the voltage readings of a unit under test with the pre-recorded readings of a unit that was known to be good. We do this today in solid state gear. We say that the readings are so-and-so dBs different, 20 log(V2/V1), based on *voltage only* readings. In fact most voltage-measuring instruments such as VTVMs and spectrum analyzers(with hi-Z probes) have scales marked in dBs. The values of the circuit resistances are ignored and may even be unknown. This is *very* common practice even when R2 and R1 are not precisely (or even approximately) known. This method is not foolproof, but very often it works OK.

I personally have no philosophical hangup about this as long as I understand what I am doing.

Bill W0IYH

1684. MT2000 operating instructions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:36:30 UTC
From: Kevin <h175a@multipro.com>
Message-ID: <8pe3fsagk1@nnrp1.deja.com>
Source record: 181202

Hi,I have one Motorola MT2000 operating instruction manual foe sale.I
is origanal not a photocopy.It is in great condition.And also includes
Quick-Referance cards for both the A4 and A7 models.Also in the back
There is a form to receive a free manuel,Either
Therory/troubleshootiing Or a Service manuel for FREE.I am asking 30.00
for this manual or best offer.Please e-mail direct if you are
interested or have any questions at h175a@multipro.com .Thanks- Kevin

Sent via Deja.com http://www.deja.com/
Before you buy.

1685. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:41:30 UTC
From: richardharrison@webtv.net
Message-ID: <17965-39BA926A-46@storefull-116.iap.bryant.webtv.net>
Source record: 181206

Chip, N1IR wrote:
"I repeat: a measurement in V/m can NEVER EVER be converted into a power."

I repeat: a power can be inferred from a voltage measurement when you know what reistance is producing the voltage drop.

Further, for a db difference, you don`t even need the resistance value. You just need to know that the same resistance value produced both voltage drops being compared, and that these measurements weren`t upset by the instrumentation.

Best regards, Richard Harrison, KB5WZI

1686. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 19:52:20 UTC
From: sideband <sideband@cac.net>
Message-ID: <jg4lrssv3vselaqqqvpcmigk9op6dp9m94@4ax.com>
Source record: 181203

On or about 09 Sep 2000 12:02:29 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:BOSS:" Last month you said that about Bill Gates-- but this company isn't gonna
:throw away its PC's. Get back to work. besides, the other guy complaining is a
:competitor and slung enough libel as it was."

Um... Microsoft's operating systems aren't the only OS's that run on
PC hardware... NetBSD, FreeBSD, OpenBSD, Linux (8+ variants), and
Solaris all run on PC hardware. There are, I'm sure, others as well.
This point of yours, like others you make, has only a partial basis in
the facts, and the rest is pulled from whatever universe and/or mental
state your mind resides in most of the time.

:
:This is probably one of the most destructive uses of the internet--not to
:express OPINION<--but to make tangible and global efforts to destroy a high
:tech firm.

Seems to me you are the only one making statements of fact which have
no real basis. Others here seem to be expressing their opinion, and
you go nuts over it, Chip. The animosity seems to stem from the fact
that you have yet to provide concise. nonpartial, comparitive
performance data about any of the fractal antennae you claim to have
built. You refuse to believe that anyone can build a variant of any
non-fractal antenna and get performance out of it that exceeds the
vague outlines you have provided to the newsgroup.

Maybe answering the questions, providing the nonpartial data in the
first place would have avoided all this animosity.

:Fortunately, those days are numbered: with this type of manipulation
:being shut down everyday, its only a matter of time before such libelous
:activity explicitly has laws written against it.
:
:I've been here 5 years. I am patient. And right.

You may be too far to the right.
:
:73
:Chip N1IR

73's

-SSB

1687. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:08:24 UTC
From: sideband <sideband@cac.net>
Message-ID: <l36lrs8gcj5ukphr7g4f1f3prm3p20sm7u@4ax.com>
Source record: 181204

Press record on the camcorder, open the door, put in the camcorder, shut the door, wait 2 minutes, open the door, remove the camcorder, close the door, hook the camcorder up to the TV, press rewind, press stop, press play, watch TV.

::grin::

Just my two cents.

-SSB

On or about Fri, 08 Sep 2000 23:58:49 GMT, Gilbert Mouget <gilbert.mouget@waika9.com>, using the forum rec.radio.amateur.antenna did say:

:
:
:Salut,
:
:I am a bit puzzled.
:I bought a refrigerator.
:When I open the door there is a light inside.
:Is it possible to tell if the lamp is really switched off
:when the door is closed ?
:
:Thanks for the answers and 73

1688. Re: Bandwidth - 3 el 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:09:30 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39BA993E.CB05D46E@bellatlantic.net>
Source record: 181205

Thanks. SWR bandwidth is the best indicator I have.
I'll discuss that in detail later in this post.
I don't care about gain. With 3 elements and 44" spacing
you can't do much better than whatever gain it produces.
Besides, I can't measure gain, and Id rather have a little
less gain in favor of more bandwidth, in any event.
F/B is irrelevant here. The band is pretty dead most of the
time, and I'll be using this antenna during the dead months.

On the VSWR issue - I'm measuring it with the antenna in
the driveway through 20' of RG 8M. I add and remove a 4'
coax jumper during the measurements, just to be sure I'm
not being deceived due to coax length. When the thing goes
up on the roof I'll re-adjust the gamma. Raising it does
change the SWR.

On to the statement that VSWR is not a very good indicator
of antenna performance. True. And False. For most hams,
it is the BEST measure, simply because we do not have the
means to measure anything else. If a ham had an antenna
test range, measurements other than SWR would be possible
and beneficial. And as to indicator, the best indicator is
listening with the rig. If you hear more with the new antenna
than what you heard before, the antenna is a "good" performer.

For probably better than 99% of hams, F/B and gain are text
book or modelling program numbers and are important at the
design phase of the antenna. Once a design has been chosen,
those numbers are irrelevant. A few of those hams may have
the ability and interest to spend the time tweaking the antenna
for maximum of gain, or F/B, using a field strength meter. The
ARRL handbook and the ARRL antenna book, plus a calculator
gave me some good design info and an expectation of gain and
F/B for this antenna, but I couldn't figure out VSWR bandwidth
with the same kind of expectation of what it should be. So that
was why I asked about it - hoping that those who had experience
with 3 elements on 6 would know roughly what I should expect.

> ehsjr@bellatlantic.net wrote:
>
> > What bandwidth should one expect to get with a
> > 3 element yagi for 6 meters, using 7/8 tubing for
> > the elements and 44" spacing between, and using
> > 1.7 to 1 as the SWR bandwith. Gamma match.
> > I'm getting very close to 1 MHZ, but I'm not

> > pleased with my mechanical design and will be
> > re-working things. I really hoped for the 2 mhz
> > another ham thought I could obtain, but I feel that
> > is unrealistic.
>
> The BW you have is probably typical, although you did not say whether
> this was measured at the antenna or in the shack. . But perhaps you
> should be more concerned with what the gain and F/B are doing over the
> BW you desire. VSWR is not a very good indicator of antenna performance.

1689. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:23:43 UTC
From: richardharrison@webtv.net
Message-ID: <5321-39BA9C4F-3@storefull-114.iap.bryant.webtv.net>
Source record: 181212

Chip, N1IR wrote:
"You CANNOT convert a measurement in V/m into a power."

Physically this is happening countless times at this very moment.

Put up a wire in the best conditions in an electromagnetic field of so many volts per meter. Then, the voltage induced in the wire can be very nearly the volts per meter of the field.

Half the energy captured will be absorbed by a load matched to the radiation resistance of the wire. The other half of the energy will be reradiated as represented by the radiation resistance.

If we use this particular arrangement to capture different voltages per meter, the powers will conform to all db measurement and relationship requirements as we surely have the same impedance for all measurements.

Best regards, Richard Harrison, KB5WZI

1690. SGC-230 Pro tuner problem revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:25:08 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <E0xu5.34432$C42.1528556@newsread2.prod.itd.earthlink.net>
Source record: 181207

Early this year in this newsgroup, I asked whether or not other users of the SGC-230 Pro model automatic tuner had experienced a problem similar to one I'd found. The problem involved a spurious low-level signal that could be heard moving up or down the band while receiving with the tuner active. At that time, I heard from six other users of the tuner who were having the same problem.

In June, I sent my 230 Pro back to SGC for analysis, complete with recordings of the mysterious signal. This past week, I heard from SGC and they explained that the spurious signal originates in one of the oscillators unique to the 230 Pro. Note that the Pro model includes a remote computer interface and they use an oscillator-driven 5 VDC supply in that added circuitry. I was not happy to hear that there is no engineering solution to the problem. This problem does NOT exist in the standard SGC-230 model - only in the 230 Pro model. So, if you have a 230 Pro with the problem, and your unit is still under warranty, you might want to begin the arm twisting with SGC or your SGC dealer to have your unit replaced with a standard 230. If you do that, be prepared to be without your tuner for a long time. Getting SGC to pay attention to your problem will not be easy and you'll have to be persistent.

According to SGC, the 230 Pro model was developed for a single high-volume commercial customer and they thought the features might be of interest to the general ham community. It didn't work out that way and that's why AES was selling them at a big discount a couple of years back.

K8AC
Floyd Sense - Angier, NC

1691. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:29:53 UTC
From: fractenna@aol.com
Message-ID: <20000909162953.20174.00000383@ng-da1.aol.com>
Source record: 181208

>Chip, N1IR wrote:
>"I repeat: a measurement in V/m can NEVER EVER be converted into a
>power."
>
>I repeat: a power can be inferred from a voltage measurement when you
>know what reistance is producing the voltage drop.
>
>Further, for a db difference, you don`t even need the resistance value.
>You just need to know that the same resistance value produced both
>voltage drops being compared, and that these measurements weren`t upset
>by the instrumentation.
>
>Best regards, Richard Harrison, KB5WZI
>

I repeat:

A measurement in V/m can NEVER EVER be converted into a power.

Best,
Chip N1IR

1692. service monitor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:30:08 UTC
From: Jim <pinkston@networksplus.net>
Message-ID: <39ba9e33@news.networksplus.net>
Source record: 181215

Forgive me if this is off topic but....
I've been looking around at service monitors but I can't seem to find any comparison info between IFR, Motorola, Marconi, Stabilock, Wavetek etc. I can only find out what features each has. I can't seem to find out whether one is more stable, if one is easier to get parts for (not obsolete) etc. I like IFR because I've been around them. But I need to go with what's the best buy overall.
Any info would be appreciated.
Thanks
Jim
KC0GSX

1693. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:34:09 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39BA9F05.CB3B04EF@bellatlantic.net>
Source record: 181210

If you haven't tried one yourself, you are missing something.
Once you've tried it, you can speak from your own experience
about how much its performance is impacted by it's surroundings,
on how critical the tuning is, on how well/poorly it matches,
on how well/poorly it performs etc etc. To me, it is interesting
enough that I think you ought to try it, just for the fun and
learning. The damn thing works better than it ought to, based
on its appearance. I had enough success with a 2 meter DDRR
to schedule some more experimentation with it. If nothing else,
it revealed that my testing of it was faulty. If the antenna ends up
as a dog in my view, it will at least have helped me learn to test
a little better.

Jake Brodsky wrote:

> Anyone who has been on the NG for a few years has seen the
> documentation on just how poor the DDRR is. So why does the ARRL
> continue mention of this antenna in anything resembling a positive
> light? Am I missing something?
>
> 73,
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

1694. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:41:27 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39BAA076.DAC5FCFD@fgi.net>
Source record: 181209

Take out the lamp, freeze the glass envelope in an ice cube,
check lamp continuity,replace the lamp and close the door.
If the ice cube falls off the light is staying on
Or the elephant licked the ice off
Art Unwin KB9MZ.

W4JLE wrote:

> 1.Take out the elephant, get in yourself and close the door.
>
> --
>
> Fred W4JLE
> http://w4jle.com/
>
> "Gilbert Mouget" <gilbert.mouget@waika9.com> wrote in message
> news:MPG.142412b2fd597b6998973b@news.free.fr...
> >
> > 9 Sep 2000 06:10:57 GMT dans l'article
> > <8pck9h$8r$8@bashir.peak.org>
> > l'honorable Bill Nelson <billn@spock.peak.org> escrivit :
> >
> > > Gilbert Mouget <gilbert.mouget@waika9.com> wrote:
> > >
> > > : Salut,
> > >
> > > : I am a bit puzzled.
> > > : I bought a refrigerator.
> > > : When I open the door there is a light inside.
> > > : Is it possible to tell if the lamp is really switched off
> > > : when the door is closed ?
> > >
> > > Very easily, if you have a way to measure the current that the
> > > refrigerator draws. It is easiest when the motor is not running.
> >
> >
> > Sorry, I have no way to measure the current.
> >
> > And yes, there is an answer.
> >
> > --
> > Gilbert.
> >

1695. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 20:48:01 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39BAA201.B932003A@fgi.net>
Source record: 181211

K1BQT wrote:

> Snip
>
> Besides, it's illegal in most states to shoot a giraffe.
> Unless you can see the white of the eyes by standing on tippy-toes

Art

>
> Rick K1BQT

1696. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:10:12 UTC
From: k1bqt@aol.com
Message-ID: <20000909171012.00708.00000004@ng-cr1.aol.com>
Source record: 181214

Throw the cat inside. If, in 20 minutes, the cat's comfortably snoozing, the light's been on. If, in 20 minutes, the cat has caught a mouse, it's been off.

Rick K1BQT

1697. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:14:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAA831.34967AA1@eznec.com>
Source record: 181213

Fractenna wrote:
>
> >A DDRR pretends to be
> >a real short vertical antenna,
>
> Pat--
>
> I told you this:-) The circle phase cancels against the ground image in the far
> field, and only the vertical parts radiate. Given the fact that the circle has
> reactance and resistance, it functions as a load.
>
> 73
> Chip N1IR

But on July 7, Fractenna wrote:

>I am one of the few here who has actually used, built, and advanced DDRR
>designs. Indeed, since 1996 I have posted on them many,many times.
>
>I have found W8JI's comments on them a mere rehash of what is already well
>known, and indeed, readily available on the NG archives, and such books as
>Moxon's, and so on.
>
>He doesn't understand them well, perhaps because he hasn't built them. There is
>certainly much more to them than being
>'dummy loads' or 'top loaded verticals'. For example: they have several modes
>and come in several sizes. Some designs are quite efficient and high in
>performance. just as some inverted F designs are so.

Roy Lewallen, W7EL

1698. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:25:58 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <6t9ep8.qqb.ln@mail.specsol.com>
Source record: 181218

Fractenna <fractenna@aol.com> trolled the newsgroup by writting:
>>
>>Chip N1IR wrote:
>>"You can never get units of WATTS from the dimensions of V/M without
>>invoking an additional dimensioned quantity."
>>
>>We trust that in a resistance of ANY type the current will be
>>proportional to the voltage, Ohms law will apply, and the power is the
>>voltage squared divided by the resistance.
>>
>>We have a 377 ohm value for free space. (Maybe I should refer to a book,
>>but I`m not designing a jet aircraft so I don`t absolutely have to be
>>right on this.)
>>
>>Best regards, Richard Harrison, KB5WZI
>>
>>

> I will say it again. You CANNOT convert a measurement in V/m into a POWER.
> You CAN convert into a POWER DENSITY.

> More info is needed for POWER.

> If what everyone insists is that it's ok to be sloppy between a 'power density'
> and a 'power' ...uh uh. that's a no no. You will never ever convince me for the
> simple reason that it is not tenable.

> Regards,

> NC

> 73
> Chip N1IR

Chip is trolling and confusing (purposefully) the issue again with semantic
babbling.

For those that have forgotten, the issue is:

dB=20*log(voltage ratio), NOT 10*log(voltage ratio); V/m is Volts.

Jim Pennino

1699. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:26:29 UTC
From: k1bqt@aol.com
Message-ID: <20000909172629.00708.00000010@ng-cr1.aol.com>
Source record: 181216

Hi Barry,

>How to build a UHF-VHF antenna, maybe you know a web-site with all the sizes and parameters of antennas, or maybe you can explain it here?<

Find a good University that actually teaches RF. Graduate and buy a current HP network analyzer. Start a company and manufacture UHF-VHF antennas for about 20 years. Sell the company for a huge profit and retire. Then, you probably won't be one inch closer than you are now (hi).

But, I'd start with the ARRL Antenna Handbook and work from there!

Rick K1BQT

1700. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:33:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAAC8E.AC383AE5@eznec.com>
Source record: 181217

Fractenna wrote:
>
> I am extremely disappointed with some of the ignorance here.
>
> If you have two values: 27.5 V/m versus 3 V/m we see that the ratio of the two
> is
>
> 27.5 v/m / 3 v/m
>
> This is very close to a value of 10 and it is DIMENSIONLESS.
>
> Now dB is a logarithmic scale. IT IS COMMONLY represented as POWER ratios--BUT
> NOT ALWAYS!
>
> Thus the ratio of voltages is a 10dB difference (approximate),
>
> IF ONE EXPLICITLY IS REFERRING TO POWER then the voltages square and there is
> approximately a 20 dB difference in POWER.
>
> Hope this helps. I don't want to see some youngster slinging around the idea
> that 20 dB corresponds to a ratio of 10.
>
> 73
> Chip N1IR

Finally! I have a credential Chip respects, being 9 years less 4 days
older than he is. Thus, I'm not one of those no-'count "youngsters".

I hope no one will be misled by the statements he made.

A ratio of voltages, currents, or field strengths (volts or amps per
linear unit) is dimensionless, as Chip points out. When a ratio of these
quantities is expressed in dB, the correct definition is dB = 20 *
log(ratio) where log is a base-10 logarithm. 20 dB does correspond to a
voltage or current ratio of 10 -- and this time you didn't hear it from
a "youngster". You can find this in any, and I mean any, elementary
text, from the absolute beginner through engineering levels.

When a power or power density ratio, which is also dimensionless, is
described in dB, the definition is 10 * log(ratio). 10 dB corresponds to
a power ratio of 10.

The reason for this dual definition is so that when the power in a given
circuit changes by, say, 20 dB (a factor of 100), the voltage and
current also change by a factor of 20 dB (a factor of 10).

I think this was on the Novice exam. It's surely on the Technician/General, so I'm sure nearly everyone reading this newsgroup is aware of these definitions. I'm posting it just to avoid the remaining few from being led astray.

Roy Lewallen, W7EL

1701. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:52:06 UTC
From: w1rfi@aol.com
Message-ID: <20000909175206.15779.00000366@ng-cd1.aol.com>
Source record: 181069

>From: fractenna@aol.com (Fractenna)

>I will say it again. You CANNOT convert a measurement in V/m into a POWER.
>You CAN convert into a POWER DENSITY.

Yes, but one can use 10log(PD1/PD2) to compare power two power density figures. One can also use 10log(E1^2/E2^2) where E1 and E2 are the values of field that one can use to calcuate a specific power density. 10log(E1^2/E2^2) = 20log(E1/E2).

When you consider again the original premise, that 27.5 V/m is 19.24 dB greater than 3 V/m, in every context I can think of, the correct formula is 20log(E1/E2). First, the comparison is at a fixed impedance (377 ohms free space), so the voltages can be compared directly in dB. Second, if one is at a specific point near an antenna and measures a field of 27.5 V/m, the power to the antenna would have to be reduced by 20 dB to obtain 3 V/m at that point. In the EM field, fields and power density are converted to each other all the time, as plane-wave-equilvalent power density.

In the cable-TV industry, the signal levels inside cables are often expressed as dBuV -- dB relative to a microvolt. 10 uV is 20 dBuv. The examples go on and on.

The premise that the ratio between 27.5 V/m and 3 V/m equals 10 dB would mean that 20 dB = 10 dB. This could never be correct.

73,
Ed Hare, W1RFI

1702. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 21:55:46 UTC
From: w1rfi@aol.com
Message-ID: <20000909175546.15779.00000367@ng-cd1.aol.com>
Source record: 181070

>From: "William E. Sabin"

>We say that the readings are so-and-so dBs different,
>20 log(V2/V1), based on *voltage only* readings.

This is perfectly correct if one is comparing voltage readings at the same point in the circuit, even if the impedance is unknown. 20log((V2/x)/(V1/x)) = 20log((V1/y)/(V2/y)).

>I personally have no philosophical hangup about this as long as I understand
>what I am doing.

The real bottom line! :-)

73,
Ed Hare, W1RFI

1703. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:00:15 UTC
From: w1rfi@aol.com
Message-ID: <20000909180015.15779.00000368@ng-cd1.aol.com>
Source record: 181072

>From: fractenna@aol.com (Fractenna)

>Thanks for FINALLY agreeing Ed!

>Power density is NOT power. Power cannot be extracted directly from the v/m
>measurement. More info is needed.

True, unless one takes the /m literally. V/m can give the amount of power in a
1 square meter area.

But again, in case anyone is not following the multiple threads, power
densities can be compared using 10log(PD1/PD2), 10 log (E1^2/E2^2) or 20 log
(E1/E2) where E1 and E2 are the V/m fields being compared. Using those formula
will give the same answers and as the power to the system is varied, the E/m
fields (or the A/m field, for that matter) will correspond exactly. That is
not true if one assumes that the ratio between E1 and E2 is 10log(E1/E2).

73,
Ed Hare, W1RFI

1704. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:01:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAB327.D926BD7A@eznec.com>
Source record: 181071

Hate to tell you this, but NEC-2 and the EZNEC program you use (as well as all others), use 20 * log(Field strength ratio) to calculate the dBi gain figures they report(*). Good thing, too. By your definition, the gain of a dipole over isotropic would be 1.07 dB.

For one of many examples of the use of 20 * log(field strength ratio) to express gain in dBi, see Kraus, _Antennas_, Second Edition, p. 443.

In the far field, field strength (volts/meter or amps/meter) is easily converted to power density (watts/square meter) by using the impedance of the medium (120 * pi ohms for free space). Power densities are converted to dB by using 10 * log(power density ratio). Thus a 20 dB power density change (a factor of 100) corresponds to a 20 dB field strength change (a factor of 10).

You might want to go back and re-evaluate some of your antenna gain claims in light of this information.

Roy Lewallen, W7EL

(*) In NEC-2 and -4, the actual calculation is 10 * log((FS ratio)^2) = 20 * log(FS ratio)

Fractenna wrote:
>
> >
> >Chip, N1IR wrote:
> >"Thus the ratio of voltages (27.5 v/m / 3 v/m) is a 10 dB difference
> >approximately."
> >
> >That is a mistaken idea.
> >db = 10 log (power ratio)
> >and
> >db = 20 log (voltage ratio)
> >are really identical expressions.
> >
> >If the voltage ratio is 10, (2) is the exponent needed to raise the
> >base10 to the value of 100 which is the power ratio represented by a
> >voltage ratio of 10. Ten times the voltage produces ten times the
> >current and power is voltage times current, so the power ratio is 100.
> >db = 20 log(10) = 20 (1) = 20
> >or
> >db = 10 log(100) = 10 (2) = 20
> >
> >The answer is the same whether the voltage ratio or the power ratio is
> >used. This is as it must be because they are expressions of the same

> >actual value.
> >
> >Best regards, Richard Harrison, KB5WZI
> >
>
> Please read my previous posts Richard. What I said, in summary ,is that dB is a
> logarithmic scale that usually refers to power. However, we are not talking
> about powers here.
>
> We are talking about voltage densities.
>
> Thus
>
> 27.5 V/M / 3 V/M
>
> is a dimensionless ratio corresponding to about 10 dB, where the dB refers to
> the units so used. Formerly, it's about
>
> 10 dBV/m
>
> It is impossible to get power from these measurements. They are voltage
> densities, which, by dimensional analysis can never, ever, be translated to
> power.
>
> Thus if you formally wish to restrict the dB method to POWERS, this will never
> apply.
>
> Of course, one may take the voltage densities and calculate them as POWER
> DENSITIES (NOT power). In this case it is perfectly legitimate to square the
> values so stated to get a dB difference in POWER DENSITIES, which would thus be
> about 20 dB when expressed in the proper units.
>
> With Best Wishes,
> Chip N1IR
>

1705. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:03:45 UTC
From: w1rfi@aol.com
Message-ID: <20000909180345.15779.00000369@ng-cd1.aol.com>
Source record: 181073

>From: fractenna@aol.com (Fractenna)

>Then you would, by definition, state that it its not relevant to compare
>two measurements in units of V/m --with a dB scale. Such units can never,
ever,
>be represented as a 'power'.

Is this saying that you do not believe that the relationship between 30 V/m and
3 V/m is 10 dB? :-)

V/m can be represented as a power density by squaring the field, which can then
be compared using 10log(PD1/PD2).

73,
Ed Hare, W1RFI

1706. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:06:59 UTC
From: fractenna@aol.com
Message-ID: <20000909180659.21313.00000455@ng-fy1.aol.com>
Source record: 181075

>>From: fractenna@aol.com (Fractenna)
>
>>Thanks for FINALLY agreeing Ed!
>
>>Power density is NOT power. Power cannot be extracted directly from the v/m
>>measurement. More info is needed.
>
>True, unless one takes the /m literally. V/m can give the amount of power in
>a
>1 square meter area.
>
>But again, in case anyone is not following the multiple threads, power
>densities can be compared using 10log(PD1/PD2), 10 log (E1^2/E2^2) or 20 log
>(E1/E2) where E1 and E2 are the V/m fields being compared. Using those
>formula
>will give the same answers and as the power to the system is varied, the E/m
>fields (or the A/m field, for that matter) will correspond exactly. That is
>not true if one assumes that the ratio between E1 and E2 is 10log(E1/E2).
>
>73,
>Ed Hare, W1RFI
>

The physical quantity you have is VOLTAGE density (actually a voltage gradient in 1 D) The difference between these two values is about 10 dB in V/m.

You may square these accordingly and get POWER density, in which case there is about a 20 dB difference in w/m^2.

You will never, ever get power differences from these measurements.

I fully uinderstand what you were TRYING to say: that's not the issue.

The issue is WHY over a dozen hams will ignore the dimensional analysis and say incorrect things.

Very troubling.

73
Chip N1IR

1707. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:08:00 UTC
From: fractenna@aol.com
Message-ID: <20000909180800.21313.00000456@ng-fy1.aol.com>
Source record: 181076

>
>Hate to tell you this, but NEC-2 and the EZNEC program you use (as well
>as all others), use 20 * log(Field strength ratio) to calculate the dBi
>gain figures they report(*). Good thing, too. By your definition, the
>gain of a dipole over isotropic would be 1.07 dB.
>
>For one of many examples of the use of 20 * log(field strength ratio) to
>express gain in dBi, see Kraus, _Antennas_, Second Edition, p. 443.
>
>In the far field, field strength (volts/meter or amps/meter) is easily
>converted to power density (watts/square meter) by using the impedance
>of the medium (120 * pi ohms for free space). Power densities are
>converted to dB by using 10 * log(power density ratio). Thus a 20 dB
>power density change (a factor of 100) corresponds to a 20 dB field
>strength change (a factor of 10).
>
>You might want to go back and re-evaluate some of your antenna gain
>claims in light of this information.
>
>Roy Lewallen, W7EL
>
>(*) In NEC-2 and -4, the actual calculation is 10 * log((FS ratio)^2) =
>20 * log(FS ratio)
>
>Fractenna wrote:
>>
>> >
>> >Chip, N1IR wrote:
>> >"Thus the ratio of voltages (27.5 v/m / 3 v/m) is a 10 dB difference
>> >approximately."
>> >
>> >That is a mistaken idea.
>> >db = 10 log (power ratio)
>> >and
>> >db = 20 log (voltage ratio)
>> >are really identical expressions.
>> >
>> >If the voltage ratio is 10, (2) is the exponent needed to raise the
>> >base10 to the value of 100 which is the power ratio represented by a
>> >voltage ratio of 10. Ten times the voltage produces ten times the
>> >current and power is voltage times current, so the power ratio is 100.
>> >db = 20 log(10) = 20 (1) = 20
>> >or
>> >db = 10 log(100) = 10 (2) = 20

>> >
>> >The answer is the same whether the voltage ratio or the power ratio is
>> >used. This is as it must be because they are expressions of the same
>> >actual value.
>> >
>> >Best regards, Richard Harrison, KB5WZI
>> >
>>
>> Please read my previous posts Richard. What I said, in summary ,is that dB
>is a
>> logarithmic scale that usually refers to power. However, we are not talking
>> about powers here.
>>
>> We are talking about voltage densities.
>>
>> Thus
>>
>> 27.5 V/M / 3 V/M
>>
>> is a dimensionless ratio corresponding to about 10 dB, where the dB refers
>to
>> the units so used. Formerly, it's about
>>
>> 10 dBV/m
>>
>> It is impossible to get power from these measurements. They are voltage
>> densities, which, by dimensional analysis can never, ever, be translated to
>> power.
>>
>> Thus if you formally wish to restrict the dB method to POWERS, this will
>never
>> apply.
>>
>> Of course, one may take the voltage densities and calculate them as POWER
>> DENSITIES (NOT power). In this case it is perfectly legitimate to square
>the
>> values so stated to get a dB difference in POWER DENSITIES, which would
>thus be
>> about 20 dB when expressed in the proper units.
>>
>> With Best Wishes,
>> Chip N1IR
>>

Who are you talking to?

NC

1708. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:08:54 UTC
From: fractenna@aol.com
Message-ID: <20000909180854.21313.00000457@ng-fy1.aol.com>
Source record: 181077

>Fractenna <fractenna@aol.com> trolled the newsgroup by writting:
>>>
>>>Chip N1IR wrote:
>>>"You can never get units of WATTS from the dimensions of V/M without
>>>invoking an additional dimensioned quantity."
>>>
>>>We trust that in a resistance of ANY type the current will be
>>>proportional to the voltage, Ohms law will apply, and the power is the
>>>voltage squared divided by the resistance.
>>>
>>>We have a 377 ohm value for free space. (Maybe I should refer to a book,
>>>but I`m not designing a jet aircraft so I don`t absolutely have to be
>>>right on this.)
>>>
>>>Best regards, Richard Harrison, KB5WZI
>>>
>>>
>
>> I will say it again. You CANNOT convert a measurement in V/m into a POWER.
>> You CAN convert into a POWER DENSITY.
>
>> More info is needed for POWER.
>
>> If what everyone insists is that it's ok to be sloppy between a 'power
>density'
>> and a 'power' ...uh uh. that's a no no. You will never ever convince me for
>the
>> simple reason that it is not tenable.
>
>> Regards,
>
>> NC
>
>> 73
>> Chip N1IR
>
>Chip is trolling and confusing (purposefully) the issue again with semantic
>babbling.
>
>For those that have forgotten, the issue is:
>
> dB=20*log(voltage ratio), NOT 10*log(voltage ratio); V/m is Volts.
>
>Jim Pennino

>

There are no powers involved here . Ever.

73
Chip N1IR

1709. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:09:29 UTC
From: w1rfi@aol.com
Message-ID: <20000909180929.15779.00000371@ng-cd1.aol.com>
Source record: 181078

>From: Jim Pennino

>It is quite relevent to compare ANY two measurements (in the same units) and
>give the ratio as dB. It is also common engineering practice.

I don't recall that I have ever seen dB used in a context that was not related to power, other than seeing it sometimes used incorrectly to compare voltages measured in different impedances, or perhaps rarely to compare some specific amplitude, such as the amount of movement in a shake table. For example, I have never seen one say that there is 3 dB more water in one jar than another, or discuss a 3 dB change in velocity or a 3 dB change in resistance.

Can you give us examples of the proper use of dB in contexts other than amplitude or power?

>Expressing ratio in terms of dB does NOT imply you are comparing power.

Unless I am wrong, the definition of the Bel is a power ratio. Anyone have an IEEE dictionary handy? I am at home and don't have one.

>One does need to take care to apply the correct multiplier, i.e. 20, if the
>base unit is Volts, as in V/m.

I have never seen any multiplier other than 10 for power or amplitude^2 or 20 for amplitude. Can you provide any examples of others?

73,
Ed Hare, W1RFI

1710. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:10:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAB546.66DD8E7E@eznec.com>
Source record: 181074

Fractenna wrote:
>
> I guess I could be upset that people don't read, but I will attempt to be
> amused.
>
> I repeat: a measurement in V/m can NEVER EVER be converted into a power.
>
> Most freshman (science, engineering) freshman in college learn this in their
> chemistry classes, where profs are especially unforgiving about conversion of
> units and dimensional analysis. Less so in intro physics. Usually reasonably
> 'hand waving' in engineering:-)
>
> 73
> Chip N1IR

This is correct. But irrelevant. It's a deflection from the point of the discussion and your original statement. The contention is how to define, in dB, a ratio of field stengths. Universal usage (by Kraus, modeling programs, and all other references I know of) use 20 * log(field strength ratio). But you claim the correct formula is 10 * log(field strength ratio). By your definition were used, doubling the power to an antenna would increase its field strength by 1.5 dB, and the power density of the radiated field by 1.5 dB. I'm sure glad you're the only person using this definition!

Roy Lewallen, W7EL

1711. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:12:30 UTC
From: fractenna@aol.com
Message-ID: <20000909181230.21313.00000458@ng-fy1.aol.com>
Source record: 181080

>A ratio of voltages, currents, or field strengths (volts or amps per
>linear unit) is dimensionless, as Chip points out. When a ratio of these
>quantities is expressed in dB, the correct definition is dB = 20 *
>log(ratio) where log is a base-10 logarithm. 20 dB does correspond to a
>voltage or current ratio of 10 -- and this time you didn't hear it from
>a "youngster". You can find this in any, and I mean any, elementary
>text, from the absolute beginner through engineering levels.
>
>When a power or power density ratio, which is also dimensionless, is
>described in dB, the definition is 10 * log(ratio). 10 dB corresponds to
>a power ratio of 10.
>
>The reason for this dual definition is so that when the power in a given
>circuit changes by, say, 20 dB (a factor of 100), the voltage and
>current also change by a factor of 20 dB (a factor of 10).
>
>I think this was on the Novice exam. It's surely on the
>Technician/General, so I'm sure nearly everyone reading this newsgroup
>is aware of these definitions. I'm posting it just to avoid the
>remaining few from being led astray.
>
>Roy Lewallen, W7EL
>

Gee this is silly.

If you are using voltage ratios or current ratios to get power ratios then obviously there is a 20 log factor involved. That has nothing to do with comparing two values of V/m and expressing them as a dB difference.

dB does NOT NECESSARILY refer to POWER.

73
Chip N1IR

1712. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:13:20 UTC
From: w1rfi@aol.com
Message-ID: <20000909181320.15779.00000372@ng-cd1.aol.com>
Source record: 181081

>From: fractenna@aol.com (Fractenna)

>It's really amazing that Ed and others INSIST that you can get power from a
>measurement of V/m.

I think we are changing gears here a bit, Chip. I was not trying to say that power density is the same as power, just that power density can be derived from V/m and that it can be compared in dB by 10log(P1/P2).

>I am a bit taken aback when Ed says how wrong I am--that you CAN get
>POWER--and then in the next sentence calls it a POWER DENSITY.

That is not what I intended to say, Chip. I believe that you are wrong when you say that 10log(E1/E2) is the formula to use to compare electric field strengths. I showed the relationship between electric field strength and power density to explain why 20log(E1/E2) is the correct comparision.

Sorry for any confusion.

73,
Ed Hare, W1RFI

1713. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:14:21 UTC
From: fractenna@aol.com
Message-ID: <20000909181421.21313.00000460@ng-fy1.aol.com>
Source record: 181082

>>
>
>Fractenna wrote:
>>
>> >A DDRR pretends to be
>> >a real short vertical antenna,
>>
>> Pat--
>>
>> I told you this:-) The circle phase cancels against the ground image in the
>far
>> field, and only the vertical parts radiate. Given the fact that the circle
>has
>> reactance and resistance, it functions as a load.
>>
>> 73
>> Chip N1IR
>
>But on July 7, Fractenna wrote:
>
>>I am one of the few here who has actually used, built, and advanced DDRR
>>designs. Indeed, since 1996 I have posted on them many,many times.
>>
>>I have found W8JI's comments on them a mere rehash of what is already well
>>known, and indeed, readily available on the NG archives, and such books as
>>Moxon's, and so on.
>>
>>He doesn't understand them well, perhaps because he hasn't built them. There
>is
>>certainly much more to them than being
>>'dummy loads' or 'top loaded verticals'. For example: they have several
>modes
>>and come in several sizes. Some designs are quite efficient and high in
>>performance. just as some inverted F designs are so.
>
>Roy Lewallen, W7EL
>

I sure did Roy!

Now: if we were talking about a normal mode helix, and I mentioned, in context the point that there are other modes, and then someone made a point about the normal mode again, should you ALSO introduce this non sequaitar again>

Please explain to this group how the re-post was relevant.

73
Chip N1IR

1714. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:15:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAB67B.8E7D8641@eznec.com>
Source record: 181079

Fractenna wrote:
>
> If stating the truth puts me in the most 'outrageous' category, then please
> keep in at the top of your list!
>
> It's really amazing that Ed and others INSIST that you can get power from a
> measurement of V/m.
>
> I am a bit taken aback when Ed says how wrong I am--that you CAN get POWER--and
> then in the next sentence calls it a POWER DENSITY.
>
> The two are hardly the same. You cannot get the power from the power density
> measurement. More info is needed. Just use dimensional analysis to balance it
> out and figure what is 'missing'--even though the answer is obvious.
>
> 73
> Chip N1IR

Sorry, Chip, I won't let you get away with steering the topic to the question of whether power can be derived from field strength alone. Of course it can't. We all know that. And we all notice that no one has been arguing that point. The point regards expressing a ratio of field strengths in dB. Please address that issue.

Good technique, though. Have you considered a career in politics?

Roy Lewallen, W7EL

1715. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:16:15 UTC
From: fractenna@aol.com
Message-ID: <20000909181615.21313.00000461@ng-fy1.aol.com>
Source record: 181083

>Chip, N1IR wrote:
>"You CANNOT convert a measurement in V/m into a power."
>
>Physically this is happening countless times at this very moment.
>
>Put up a wire in the best conditions in an electromagnetic field of so
>many volts per meter. Then, the voltage induced in the wire can be very
>nearly the volts per meter of the field.
>
>Half the energy captured will be absorbed by a load matched to the
>radiation resistance of the wire. The other half of the energy will be
>reradiated as represented by the radiation resistance.
>
>If we use this particular arrangement to capture different voltages per
>meter, the powers will conform to all db measurement and relationship
>requirements as we surely have the same impedance for all measurements.
>
>Best regards, Richard Harrison, KB5WZI
>

Greetings Richard;

You CANNOT convert a measurement of V/m into a POWER.

Don't be a wiseguy and divert the issue to areas.

Maybe you'll like this one to:

You CANNOT convert a measurement of SPEED into a DISTANCE.

73
Chip N1IR

1716. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:19:16 UTC
From: fractenna@aol.com
Message-ID: <20000909181916.21313.00000462@ng-fy1.aol.com>
Source record: 181085

>>From: fractenna@aol.com (Fractenna)
>
>>It's really amazing that Ed and others INSIST that you can get power from a
>>measurement of V/m.
>
>I think we are changing gears here a bit, Chip. I was not trying to say that
>power density is the same as power, just that power density can be derived
>from
>V/m and that it can be compared in dB by 10log(P1/P2).
>
>>I am a bit taken aback when Ed says how wrong I am--that you CAN get
>>POWER--and then in the next sentence calls it a POWER DENSITY.
>
>That is not what I intended to say, Chip. I believe that you are wrong when
>you
>say that 10log(E1/E2) is the formula to use to compare electric field
>strengths. I showed the relationship between electric field strength and
>power
>density to explain why 20log(E1/E2) is the correct comparision.
>
>Sorry for any confusion.
>
>73,
>Ed Hare, W1RFI

Wrong again. 20 Log (E1/E2) is a POWER ratio, or produces a power ratio, under certain constant assumptions.

This has NOTHING to do with the original post,and my original response.

73
Chip N1IR

1717. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:22:18 UTC
From: fractenna@aol.com
Message-ID: <20000909182218.21313.00000463@ng-fy1.aol.com>
Source record: 181086

>
>Fractenna wrote:
>>
>> If stating the truth puts me in the most 'outrageous' category, then please
>> keep in at the top of your list!
>>
>> It's really amazing that Ed and others INSIST that you can get power from a
>> measurement of V/m.
>>
>> I am a bit taken aback when Ed says how wrong I am--that you CAN get
>POWER--and
>> then in the next sentence calls it a POWER DENSITY.
>>
>> The two are hardly the same. You cannot get the power from the power
>density
>> measurement. More info is needed. Just use dimensional analysis to balance
>it
>> out and figure what is 'missing'--even though the answer is obvious.
>>
>> 73
>> Chip N1IR
>
>Sorry, Chip, I won't let you get away with steering the topic to the
>question of whether power can be derived from field strength alone. Of
>course it can't. We all know that. And we all notice that no one has
>been arguing that point. The point regards expressing a ratio of field
>strengths in dB. Please address that issue.
>
>Good technique, though. Have you considered a career in politics?
>
>Roy Lewallen, W7EL
>

Roy,

You are working hard at this point in being a jerk. So let me give a sincere
and honest response.

Just shut up.

Chip N1IR

1718. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:22:57 UTC
From: kleinNOSPAM@gilhousen.com
Message-ID: <39bcb520.91328353@news>
Source record: 181088

On 09 Sep 2000 18:57:48 GMT, fractenna@aol.com (Fractenna) wrote:

>Please follow my posts.
>
>dB is not exclusively used to describe powers (which I already said).

Not according to the references that I provided. Please provide a
reference that contradicts my references.

>But let's take, for the moment, the original post from W1RFI:
>
>>The levels in various immunity standards are approximately 3 V/m. The levels
>>in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>>correlate RFI and RFX issues with 20 dB of difference between the two.
>>
>>73,
>>Ed Hare, W1RFI
>
>Since neither measurement gives POWER, your definition would require that dB is
>not an acceptable means of description.

Not at all. As I explained my post (as well as have many others) it
is quite correct to use dB to compare voltages provided that any
differences in impedance (not applicable in Hare's example) are taken
care of.

>In fact, dB is used for purposes other than describing power.

Please name one. How about dB$? But money is power, so there you
are.

> In this case,
>there is the almost 10dB difference in v/m. From this ONE CAN GET THE POWER
>DENSITY which is about 20dB..you figure out the units:-) It ain't watts!

Incorrect. You are just going to have to admit that you have made an
error here. There is no way that there is a 10 dB difference in v/m
in the above example. It is 20 dB. You are wrong.

No one is saying that watts are being calculated. What is being
calculated is relative power. There are no units - the units got
divided out because they were the same. v/m over v/m is unit-less.

>Dimensional analysis lives:-)!

Yes, it lives somewhere, but not, apparently, in your head.

Klein Gilhousen, WT6G

1719. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:23:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAB84A.D4BF8664@eznec.com>
Source record: 181084

Not long ago, someone suggested that he might avoid Fractenna products
on the basis of his observations of Chip's behavior. This might or might
not be justified or reasonable. But as an engineer, I'd surely look
carefully at any gain claims in light of the fundamental
misunderstanding expressed here.

Roy Lewallen, W7EL

Fractenna wrote:
>
> >The levels in various immunity standards are approximately 3 V/m. The levels
> >in the RF exposure standards are >= 27.5 V/m. It is very difficult to
> >correlate RFI and RFX issues with 20 dB of difference between the two.
> >
> >73,
> >Ed Hare, W1RFI
> >
> >
>
> 10 dB between those two values...
>
> 73
> Chip N1IR>>
>
> I repeat Ed; the "difference between these two values..."is of order 10 dB; not
> 20 dB.
>
> The POWER difference is, of course of order 20 dB. But as posted, I have
> concerns that some may have been unintentionally misled.
>
> Best,
> Chip N1IR

1720. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:23:31 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <DLyu5.181571$i5.2625589@news1.frmt1.sfba.home.com>
Source record: 181087

Dr. Cohen,

Do you own the street?

Sincerely Curious,

Mike Camp KI7FQ (Only BS)

"Fractenna" <fractenna@aol.com> wrote in message
news:20000909083647.20824.00000081@ng-fl1.aol.com...
> Greetings--
>
> I will be holding an open house from 10-1 on Saturday, Sept 16,2000 with
my
> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
> (see ham page of
>
> http://www.fractenna.com)
>
> will be up for operating from N1IR. I will also have my station logs
> available for viewing the many successful 10M QSO runs I have experienced
wit
> the FQY.
>
> Please let me know by 12 Sept if you wish to attend; attendance will be
> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
unuathorized
> cars will be towed due to restricted street parking. And please bring your
> license if you wish to operate.
>
> I regret that some individuals will not be permitted to attend, due to
their
> previous on-line behavior.
>
> I am located in Belmont, MA, next to the new Boston Temple of the Mormons.
I am
> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions to
> those attending by 15 Sept.
>
> Hope to see you then.
>
> 73
> Chip N1IR
>
>

1721. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:24:31 UTC
From: fractenna@aol.com
Message-ID: <20000909182431.21313.00000464@ng-fy1.aol.com>
Source record: 181089

>
>Fractenna wrote:
>>
>> I guess I could be upset that people don't read, but I will attempt to be
>> amused.
>>
>> I repeat: a measurement in V/m can NEVER EVER be converted into a power.
>>
>> Most freshman (science, engineering) freshman in college learn this in
>their
>> chemistry classes, where profs are especially unforgiving about conversion
>of
>> units and dimensional analysis. Less so in intro physics. Usually
>reasonably
>> 'hand waving' in engineering:-)
>>
>> 73
>> Chip N1IR
>
>This is correct. But irrelevant. It's a deflection from the point of the
>discussion and your original statement. The contention is how to define,
>in dB, a ratio of field stengths. Universal usage (by Kraus, modeling
>programs, and all other references I know of) use 20 * log(field
>strength ratio). But you claim the correct formula is 10 * log(field
>strength ratio). By your definition were used, doubling the power to an
>antenna would increase its field strength by 1.5 dB, and the power
>density of the radiated field by 1.5 dB. I'm sure glad you're the only
>person using this definition!
>
>Roy Lewallen, W7EL
>
>

No,no,no.

Stop being a jerk.

Take the original post from W1RFI and see what HE said, and WHAT I said.

Stop being a jerk by saying what you WANTED us to say.

NC

1722. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:26:14 UTC
From: fractenna@aol.com
Message-ID: <20000909182614.21313.00000465@ng-fy1.aol.com>
Source record: 181090

>
>>From: fractenna@aol.com (Fractenna)
>
>>Then you would, by definition, state that it its not relevant to compare
>>two measurements in units of V/m --with a dB scale. Such units can never,
>ever,
>>be represented as a 'power'.
>
>Is this saying that you do not believe that the relationship between 30 V/m
>and
>3 V/m is 10 dB? :-)
>
>V/m can be represented as a power density by squaring the field, which can
>then
>be compared using 10log(PD1/PD2).
>
>73,
>Ed Hare, W1RFI
>

I've had enough. You are hopeless on this.

Klein said that dB ONLY refers to power.

Thus it cannot refer to power density. WHAT I WAS ILLUSTRATING was that if
refers to ratio of quantites besides power.

NC

1723. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:26:48 UTC
From: w1rfi@aol.com
Message-ID: <20000909182648.15779.00000374@ng-cd1.aol.com>
Source record: 181091

>From: 2w8ji@contesting.com (Tom W8JI)

>So is the wave mainly vertically polarized, the wave angle low, or
>does the vertical work better than the model shows?

Hi, Tom,

I started a more detailed response yesterday at lunch, but got sidetracked by the end of my lunch break. :-) I will finish it Monday, though I do not have a good answer to the main question.

The one thing that occured to me in reading that paragraph was, although I can't think of any reason that on 160 M, DX signals would arrive primarily vertically polarized, if they did, based on your hundreds of tests, you would see the vertical consistently stronger, or at least about equal to the dipole, but with normal fades from time to time as the polarization rotated towards horizontal. On the dipole, at least some of "fades" would be enhancement and you would see the dipole at least occasionally show an increase in signal as the polarization rotated horizontal. This would probably be swamped by normal propagation variations, and I don't think it at all likely, but the absence of the phenomenon may well be one point against the waves being predominantly vertically polarized.

I'm still thinking about all this; this is a very interesting problem! Thanks for bringing it up. It has brought me 20log(Joy1/Joy2) worth of enjoyment. :-)

73,
Ed Hare, W1RFI

1724. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:28:28 UTC
From: fractenna@aol.com
Message-ID: <20000909182828.21490.00000025@ng-fy1.aol.com>
Source record: 181092

>
>Dr. Cohen,
>
>Do you own the street?
>
>Sincerely Curious,
>
>Mike Camp KI7FQ (Only BS)
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000909083647.20824.00000081@ng-fl1.aol.com...
>> Greetings--
>>
>> I will be holding an open house from 10-1 on Saturday, Sept 16,2000 with
>my
>> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
>> (see ham page of
>>
>> http://www.fractenna.com)
>>
>> will be up for operating from N1IR. I will also have my station logs
>> available for viewing the many successful 10M QSO runs I have experienced
>wit
>> the FQY.
>>
>> Please let me know by 12 Sept if you wish to attend; attendance will be
>> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
>unuathorized
>> cars will be towed due to restricted street parking. And please bring your
>> license if you wish to operate.
>>
>> I regret that some individuals will not be permitted to attend, due to
>their
>> previous on-line behavior.
>>
>> I am located in Belmont, MA, next to the new Boston Temple of the Mormons.
>I am
>> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions to
>> those attending by 15 Sept.
>>
>> Hope to see you then.
>>
>> 73

>> Chip N1IR
>>
>>

Hi Mike--

No; but there is restricted parking because of the adjacent Temple Open House.

Are you going to join us?

73
Chip N1IR

1725. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:30:16 UTC
From: fractenna@aol.com
Message-ID: <20000909183016.21490.00000026@ng-fy1.aol.com>
Source record: 181094

>Not according to the references that I provided. Please provide a
>reference that contradicts my references.
>

Why don't you flame with W1RFI, I don't need to be a go between on this.

Please appreciate that this means that dB are not relevant in discribing power densities, and that one must adopt some other scale==if what you say is correct.

73
Chip N1IR

1726. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:30:30 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39BABA06.7767827F@hiwaay.net>
Source record: 181093

YOU PEOPLE ARE FEEDING THE TROLL!!

When will you learn- he changes the basis of the discussion to an obvious absurdity- then claims victory.

If you continue to let him do this crap- he IS the victor

Bill

1727. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:32:10 UTC
From: fractenna@aol.com
Message-ID: <20000909183210.21490.00000027@ng-fy1.aol.com>
Source record: 181095

>
>Not long ago, someone suggested that he might avoid Fractenna products
>on the basis of his observations of Chip's behavior. This might or might
>not be justified or reasonable. But as an engineer, I'd surely look
>carefully at any gain claims in light of the fundamental
>misunderstanding expressed here.
>
>Roy Lewallen, W7EL
>
>Fractenna wrote:
>>
>> >The levels in various immunity standards are approximately 3 V/m. The
>levels
>> >in the RF exposure standards are >= 27.5 V/m. It is very difficult to
>> >correlate RFI and RFX issues with 20 dB of difference between the two.
>> >
>> >73,
>> >Ed Hare, W1RFI
>> >
>> >
>>
>> 10 dB between those two values...
>>
>> 73
>> Chip N1IR>>
>>
>> I repeat Ed; the "difference between these two values..."is of order 10 dB;
>not
>> 20 dB.
>>
>> The POWER difference is, of course of order 20 dB. But as posted, I have
>> concerns that some may have been unintentionally misled.
>>
>> Best,
>> Chip N1IR
>

Like I said: acting like a jerk. OK Roy; why don't you document one said 'gain claim' that is incorrect. Go ahead. I've got nothing to hide.

NC

1728. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:33:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8peel5$n3l$1@plutonium.btinternet.com>
Source record: 181098

Jim Pennino said
>
> dB=20*log(voltage ratio)
======================

ONLY provided the two voltages forming the ratio are with respect to the same impedance, resistance or load resistor, etc, which is frequently not specified because it is obvious from the context. And the same applies to dB = 20*log(current ratio).

10*log(power ratio) is without reference to anything except two power levels which may be in two different circuit or system locations. Eg., at the input and output of an amplifier having a load impedance entirely different from its input impedance. A power gain can occur when input volts is greater than output volts as in a cathode or emitter follower.

Reg.

1729. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:34:08 UTC
From: w1rfi@aol.com
Message-ID: <20000909183408.15779.00000378@ng-cd1.aol.com>
Source record: 181096

>From: 2w8ji@contesting.com (Tom W8JI)

>I have 300 feet of LMR 400 up the tower, with a choke balun of RG-8X.
>There's a choke at the bottom, about 50 feet of RG-8 foam "Superflex"
>cable. The feedline back to the tower is 7/8 inch heliax about 500
>feet or so long.

Well, it ain't normal feedline losses. TLA.EXE predicts 1.05 dB loss for the nearest equivalents in the program (9913 for the LMR400 and 3/4" 75-ohm hardline).

The NEC model has been around for years, and as far as I know, I have not heard of any such poor correlation for vertical antennas. OTOH, any feed line problem, or antenna problem, would certainly be reflected in the SWR and I really can't see what would have to be about 6 dB of loss in the feedline, not at all probable. Still, have you ever measured the power at the top of the tower?

Man, you spent a fortune in feedline alone; I can see why you are disappointed.

73,
Ed Hare, W1RFI

1730. Re: Balun Usage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:41:22 UTC
From: w1rfi@aol.com
Message-ID: <20000909184122.15779.00000379@ng-cd1.aol.com>
Source record: 181097

>From: 2w8ji@contesting.com (Tom W8JI)

>A series capacitor works better in antenna leads at the TV.

This is probably a bad idea in some of today's cable installations. If the problem is common-mode pickup, one would need to use two caps, one in the shield and one in the center conductor leads. Their value would have to be small enough to act as a high pass filter, in which case, I would have to ask, why not use a high pass filter?

Even that can be problematical for coaxial cables, because the 75-ohm HPFs don't filter the shield -- there is the common-mode problem all over again.

There are techniques to install HPFs in coaxial cables that also act as braid-breakers, but modern cable TV is starting to use the HF range for communciation between the cable box and the central office (another RFI problem in the making -- I call it job security), so a high-pass filter in a CATV system may cause problems. That box or the office may decide it has been too long since they heard from each other and your cable service may go to sleep.

>Actually the single most effective cure for TVI is shunting the common
>mode current around the TV, rather than try to stop it. That works the
>vast majorty of the time, and costs a few pennies.

Yes, grounding the cable just outside the house may help, but that can create ground loops that will really get ya' when there are nearby lightning strikes and in apartments (and even some houses) it is not always practical. And the cable wiring after the ground may pick up RF all over again.

I still prefer the common-mode choke. Palomar sells them by mail order.

73,
Ed Hare, W1RFI

1731. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 22:43:15 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8peemlssm1@slb6.atl.mindspring.net>
Source record: 181099

Ed:

You are absolutely correct and as usual Chip is WRONG (OK, maybe only reckless!)

The bel named after Alexander Graham Bell is defined in all "standard" electrical Engineering handbooks, textbooks, references encyclopedias and dictionaries as a logarithm of the ratio of two POWERS, nothing else!

Any other use of Bel and deciBel is thus non-standard.

That being said, all are permitted to go to hell in their own way, and dear scientist Chip, if he so desires can define logarithmic measures any way he wishes, he just can't claim that it is standard usage!

Next I suppose that he will want to change the standard definition of pH to be based upon a ratio of quarks, and get the chemists in an uproar.

[pH... A logarithmic measure of hydrogen ion concentration (a molecular ratio) in a solution.]

Hope this helps...

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
W1RFI <w1rfi@aol.com> wrote in message
news:20000909134150.18398.00000377@ng-fm1.aol.com...
> >From: fractenna@aol.com (Fractenna)
>
> >Then you would, by definition, state that it its not relevant to compare
two
> >measurements in units of V/m --with a dB scale. Such units can never,
ever,
> >be represented as a 'power'.
>
> That is not correct, Chip. The units of V/distance and A/distance in
> representing fields are related to (power/(distance^2) by virtue of the
> impedance of free space (377 ohms). So an electric field of 1V/m has an
> implicit relationship to power because by defintion, a field is occuring
in a
> free space impedance of 377 ohms.
>
> To convert V/m to power density, use (V^2/377)/m^2. Because the impedance

is
> identical in comparing 3 V/m and 27V/m as it relates to radiated fields
from an
> antenna, it is perfectly valid to use the formula 20*log(V1/V2) to obtain
the
> difference between the two units in dB.
>
> The ONLY definitions I have ever seen relating to the bel, the basic unit
> behind the decibel, state that it the log10 of the ratio of two powers. I
have
> never seen it applied to anything else in any text book ever. Can you
supply
> any reference that indicats that the bel is a ratio of pure numbers? the
log10
> function is very much a ratio of pure numbers, although log((X/n)/(Y/n))
is a
> perfectly valid operation for which the n's cancel out. But by defining
the
> bel as a ratio of two powers, then one can use log(P1/P2) for power and
one can
> ONLY use log(V1/V2) if V1 and V2 are both in the same impedance. In the
case
> of radiated fields, they are.
>
> I do not believe the bel could be applied to pure numbers, because if it
were,
> then 10*log ((1/1)/(1/1)) would be = 20*log((1/1)/(1/1)) if in the first
case,
> we were discussing pure numbers and in the second case, we were discussing
> those same numbers representing voltages measured in a circuit of 1 ohm.
>
> With the definition that bel = log(P1/P2) and bel = 2log(E1/E2) then
> normalizing R to 1 ohm, then bel = log(E1^2/E2^2) - 2log(E1/E2).
>
> 73,
> Ed Hare, W1RFI
>
>

1732. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:00:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pefnn$8ue$1@slb7.atl.mindspring.net>
Source record: 181100

Thread:

A volt is a volt (Actually a Volt is simply a Joule per Couloumb, the measure of energy carried per unit charge!) and a rose by any other name would smell the same.

What power is being measured by a Volts per Meter meter? ???

"in"???

What is a measurement "in" V/m??? Really Chip!

"of"

A measurement "of" V/m perhaps, but "in"!!! Really Chip! I'm ashamed of you... loose speaking, fuzzy thinking! Is that what they teach at Cornell?

And... the act of measurement is simply the record of a value read from some instrument, which may or may not be actually measuring the quantity desired by the metrologist.

Often in Engineering, indirect quantities are measured from which are inferred other derived quantities. Stress is measured by a strain guage, etc...

This is not a "conversion"!!! What????

Most field strength instrumentation is not actually measuring power and everyone knows that, except apparently Chip. A bolometer measures power, but most other field strength instruments do not measure power. We all know that!!! Except Chip, who now forbids us to "convert" it to power!!! Heh, heh, glad he's not running the Supreme Court!

A metrologist taking a reading of volts/m, or any other quantitiy for that matter, may do as they wish with the numbers once the value is recorded. for instance they may use other quantities together with dimensional analysis to "convert" said reading to another quantity.

Who, or what, will prevent them from doing so???

What exactly is Chip's point? Other than the usual obfuscation! I

I'm sure glad I didn't have to sit in his BU classes!!! If he ever had me and my classmates as students we would have fried his butt and handed it to the Dean!!!

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909162953.20174.00000383@ng-da1.aol.com...
> >Chip, N1IR wrote:
> >"I repeat: a measurement in V/m can NEVER EVER be converted into a
> >power."
> >
> >I repeat: a power can be inferred from a voltage measurement when you
> >know what reistance is producing the voltage drop.
> >
> >Further, for a db difference, you don`t even need the resistance value.
> >You just need to know that the same resistance value produced both
> >voltage drops being compared, and that these measurements weren`t upset
> >by the instrumentation.
> >
> >Best regards, Richard Harrison, KB5WZI
> >
>
> I repeat:
>
> A measurement in V/m can NEVER EVER be converted into a power.
>
> Best,
> Chip N1IR

1733. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:02:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pefs5$a6f$1@nntp9.atl.mindspring.net>
Source record: 181101

Roy:

Now I'm really worried, maybe the whole theory of fractal electromagnetics
and the recent patent are based upon this faulty metrology?

What think?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Roy Lewallen <w7el@eznec.com> wrote in message
news:39BAB546.66DD8E7E@eznec.com...
> Fractenna wrote:
> >
> > I guess I could be upset that people don't read, but I will attempt to
be
> > amused.
> >
> > I repeat: a measurement in V/m can NEVER EVER be converted into a power.
> >
> > Most freshman (science, engineering) freshman in college learn this in
their
> > chemistry classes, where profs are especially unforgiving about
conversion of
> > units and dimensional analysis. Less so in intro physics. Usually
reasonably
> > 'hand waving' in engineering:-)
> >
> > 73
> > Chip N1IR
>
> This is correct. But irrelevant. It's a deflection from the point of the
> discussion and your original statement. The contention is how to define,
> in dB, a ratio of field stengths. Universal usage (by Kraus, modeling
> programs, and all other references I know of) use 20 * log(field
> strength ratio). But you claim the correct formula is 10 * log(field
> strength ratio). By your definition were used, doubling the power to an
> antenna would increase its field strength by 1.5 dB, and the power
> density of the radiated field by 1.5 dB. I'm sure glad you're the only
> person using this definition!
>
> Roy Lewallen, W7EL

1734. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:08:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8peg62$jf3$1@slb3.atl.mindspring.net>
Source record: 181102

Well I asked Mary, and she told me that chemists are nothing more than
cooks!

However Chem E's are well gronded and Chem E's will know about pH and the
logarithm of the ratio of molecules.

But then Chip will have to define the square root of a molecule? What is
that a fractal?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909144630.15773.00000410@ng-cd1.aol.com...
> >>Then you would, by definition, state that it its not relevant to compare
> >two
> >measurements in units of V/m --with a dB scale. Such units can never,
ever,
> >be
> >represented as a 'power'.<
> >
> >Awww Shit!!! That means any dB comparrisons or dBm readings taken with
my
> >little MFJ-224 meters are totally bogus! Thank god I left THAT company
> >before
> >they found out what I've did!
> >
> >Rick K1BQT
> >
> >PS (Mary's a EE, ask her)
> >
>
> C'mon Rick; please don't go into swear mode.
>
> Yup; Mary is an engineer--but she's a Chem E. She sure pays attention to
those
> units and dimensional analysis!
>
> I didn't need to convince her that a measurement in volts/meter can't be
> converted into a power!
>
> 73

> Chip N1IR

1735. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:10:36 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pegbdnoi1@nntp9.atl.mindspring.net>
Source record: 181103

Klein:

Exactly so....

End of discussion.

Chip will not be able to produce a single referece where the Bel or deciBel
is not defined in terms of power.

He appears to be extremely deficient in his knowledge of electrical
Engineering practice.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Klein Gilhousen <kleinNOSPAM@gilhousen.com> wrote in message
news:39bb76e7.75399869@news...
> The decibel is defined as a power ratio in the references I have
> handy. Interestingly, the definition of decibel is not even mentioned
> in all my antenna reference works - I guess it's considered a high
> school physics thing (that's where I learned this.)
>
> So, for the benefit of any wandering innocents who have blundered into
> this silly discussion and are being confused by some of the arguments,
> the book "Reference Data for Engineers: Radio, Electronics, Computer,
> and Communications", Edward C. Jordan, Editor in Chief, 7th edition,
> Sams, 1991, defines it thusly:
>
> "The decibel, symbol dB, is a dimensionless unit for representing the
> ratio of two values of power. The number, n, of decibels is 10 times
> the logarithm to the base 10 of the power ratio:
> n(dB) = 10 log10 (P2/P1)
> In the electral case of voltage, V, Current, I, and impedance, Z (when
> Z is a pure resistance):
> P2/P1 = (V2/V1)^2 (Z1/Z2) = I2/I1)^2 (Z2/Z1)
> Thus,
> nV(dB) = 20log10(V2/V1) + 10log10(Z1/Z2) and
> nI(dB) = 20log10(I2/I1) + 10log10(Z1/Z2)
> Only in the special case of matched impedances (Z2=Z1) does
> n=n(z-matched) = 20log10(V2/V1) = 20log10(I2/I1)."
>
> My unabridged dictionary also says that the decibel is a way of
> expressing power ratios.

>
> Note also that a ratio of any like quantities will always be unitless.
>
>
> Note also that starting with defining the decibel as a power ratio
> leads one to immediately see that by Ohm's Law, the value of power can
> have E^/Z or I^2/Z substituted for P in the ratio. And if it is
> understood that a situation of equal impedance is being considered,
> that it is quite correct to use 20log(E2/E1) to calculate the decibel
> power ratio. Frankly, I don't see how a 10log(E2/E1) situation could
> EVER happen. Maybe for deciCohens but not for deciBels.
>
> Klein Gilhousen, WT6G
>

1736. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:15:45 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pegjiohi1@slb6.atl.mindspring.net>
Source record: 181105

Chip:

You are simply WRONG.

Any such use of dB is an obscure and non-standard usage and would never be suggested or proffered by any professional practicioner.

You are entitled to go to hell your own way, but man don't be calculating the amount of fuel left in my tanks as I am decending to the Mars surface!

Damm scientists!

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909181230.21313.00000458@ng-fy1.aol.com...
> >A ratio of voltages, currents, or field strengths (volts or amps per
> >linear unit) is dimensionless, as Chip points out. When a ratio of these
> >quantities is expressed in dB, the correct definition is dB = 20 *
> >log(ratio) where log is a base-10 logarithm. 20 dB does correspond to a
> >voltage or current ratio of 10 -- and this time you didn't hear it from
> >a "youngster". You can find this in any, and I mean any, elementary
> >text, from the absolute beginner through engineering levels.
> >
> >When a power or power density ratio, which is also dimensionless, is
> >described in dB, the definition is 10 * log(ratio). 10 dB corresponds to
> >a power ratio of 10.
> >
> >The reason for this dual definition is so that when the power in a given
> >circuit changes by, say, 20 dB (a factor of 100), the voltage and
> >current also change by a factor of 20 dB (a factor of 10).
> >
> >I think this was on the Novice exam. It's surely on the
> >Technician/General, so I'm sure nearly everyone reading this newsgroup
> >is aware of these definitions. I'm posting it just to avoid the
> >remaining few from being led astray.
> >
> >Roy Lewallen, W7EL
> >
>
>
> Gee this is silly.

>
> If you are using voltage ratios or current ratios to get power ratios then
> obviously there is a 20 log factor involved. That has nothing to do with
> comparing two values of V/m and expressing them as a dB difference.
>
> dB does NOT NECESSARILY refer to POWER.
>
> 73
> Chip N1IR

1737. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:20:06 UTC
From: kleinNOSPAM@gilhousen.com
Message-ID: <39bec3a7.95047631@news>
Source record: 181104

On 09 Sep 2000 22:30:16 GMT, fractenna@aol.com (Fractenna) wrote:

>>Not according to the references that I provided. Please provide a
>>reference that contradicts my references.
>>
>
>Why don't you flame with W1RFI, I don't need to be a go between on this.
>
>Please appreciate that this means that dB are not relevant in discribing power
>densities, and that one must adopt some other scale==if what you say is
>correct.

I do not take what I said to mean that use of the decibel to describe
ratios of power density would be improper. In fact, in my field, we
use power spectral density comparisons in dB all the time. It is
still fundamentally power that is being compared. I also believe that
W1RFI is quite correct is his use of dB with v/m. And you are wrong.

Last post from me on this one. Hopefully, last post from everyone
(except Chip, of course) as we've all said enough to convince everyone
but Chip. Besides, I've got to finish fixing my 10 element 80 meter
wire beam so I can work some VK's tonight.

Good DX,
Klein Gilhousen, WT6G

You seem to be trying to stir up a game of "let's you and him fight."

1738. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:20:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pegt8$2go$1@slb7.atl.mindspring.net>
Source record: 181106

Roy:

In light of behavior patterns as exhibited here on this NG by Chip, it is my opinion that anything he states must be taken under the old Roman dictum of "caveat emptor".

I presume that he sincerely believes in his heart that he is "right" all of the time, but God help those who join his bandwagon without question!

Thoughts, comments?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Roy Lewallen <w7el@eznec.com> wrote in message
news:39BAB84A.D4BF8664@eznec.com...
> Not long ago, someone suggested that he might avoid Fractenna products
> on the basis of his observations of Chip's behavior. This might or might
> not be justified or reasonable. But as an engineer, I'd surely look
> carefully at any gain claims in light of the fundamental
> misunderstanding expressed here.
>
> Roy Lewallen, W7EL
>
> Fractenna wrote:
> >
> > >The levels in various immunity standards are approximately 3 V/m. The
levels
> > >in the RF exposure standards are >= 27.5 V/m. It is very difficult to
> > >correlate RFI and RFX issues with 20 dB of difference between the two.
> > >
> > >73,
> > >Ed Hare, W1RFI
> > >
> > >
> >
> > 10 dB between those two values...
> >
> > 73
> > Chip N1IR>>
> >
> > I repeat Ed; the "difference between these two values..."is of order 10
dB; not

> > 20 dB.
> >
> > The POWER difference is, of course of order 20 dB. But as posted, I have
> > concerns that some may have been unintentionally misled.
> >
> > Best,
> > Chip N1IR

1739. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:24:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8peh47$ek7$1@slb7.atl.mindspring.net>
Source record: 181107

Just curious...

Why would Chip deliberately schedule an open house at his place when the
"latter day saints" are holding a big open house right next door?

Who was first to announce? The saints or Chip?

Anybody know?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909182828.21490.00000025@ng-fy1.aol.com...
> >
> >Dr. Cohen,
> >
> >Do you own the street?
> >
> >Sincerely Curious,
> >
> >Mike Camp KI7FQ (Only BS)
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000909083647.20824.00000081@ng-fl1.aol.com...
> >> Greetings--
> >>
> >> I will be holding an open house from 10-1 on Saturday, Sept 16,2000
with
> >my
> >> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
> >> (see ham page of
> >>
> >> http://www.fractenna.com)
> >>
> >> will be up for operating from N1IR. I will also have my station logs
> >> available for viewing the many successful 10M QSO runs I have
experienced
> >wit
> >> the FQY.
> >>
> >> Please let me know by 12 Sept if you wish to attend; attendance will be

> >> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
> >unuathorized
> >> cars will be towed due to restricted street parking. And please bring
your
> >> license if you wish to operate.
> >>
> >> I regret that some individuals will not be permitted to attend, due to
> >their
> >> previous on-line behavior.
> >>
> >> I am located in Belmont, MA, next to the new Boston Temple of the
Mormons.
> >I am
> >> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions
to
> >> those attending by 15 Sept.
> >>
> >> Hope to see you then.
> >>
> >> 73
> >> Chip N1IR
> >>
> >>
>
>
> Hi Mike--
>
> No; but there is restricted parking because of the adjacent Temple Open
House.
>
> Are you going to join us?
>
> 73
> Chip N1IR

1740. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:36:03 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <DPzu5.181849$i5.2627565@news1.frmt1.sfba.home.com>
Source record: 181109

Dr Cohen,

I would love to see your creations and meet you, but my wife Robin, KE6MRH, is a quadriplegic so doesn't travel and I can't leave her alone. But thanks for the offer.

Mike Camp KI7FQ

"Fractenna" <fractenna@aol.com> wrote in message news:20000909182828.21490.00000025@ng-fy1.aol.com...
> >
> >Dr. Cohen,
> >
> >Do you own the street?
> >
> >Sincerely Curious,
> >
> >Mike Camp KI7FQ (Only BS)
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000909083647.20824.00000081@ng-fl1.aol.com...
> >> Greetings--
> >>
> >> I will be holding an open house from 10-1 on Saturday, Sept 16,2000 with
> >my
> >> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
> >> (see ham page of
> >>
> >> http://www.fractenna.com)
> >>
> >> will be up for operating from N1IR. I will also have my station logs
> >> available for viewing the many successful 10M QSO runs I have experienced
> >wit
> >> the FQY.
> >>
> >> Please let me know by 12 Sept if you wish to attend; attendance will be
> >> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
> >unuathorized
> >> cars will be towed due to restricted street parking. And please bring your
> >> license if you wish to operate.
> >>

> >> I regret that some individuals will not be permitted to attend, due to
> >their
> >> previous on-line behavior.
> >>
> >> I am located in Belmont, MA, next to the new Boston Temple of the
Mormons.
> >I am
> >> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions
to
> >> those attending by 15 Sept.
> >>
> >> Hope to see you then.
> >>
> >> 73
> >> Chip N1IR
> >>
> >>
>
>
> Hi Mike--
>
> No; but there is restricted parking because of the adjacent Temple Open
House.
>
> Are you going to join us?
>
> 73
> Chip N1IR

1741. Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:37:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAC9BD.22A3C90A@eznec.com>
Source record: 181108

I just got a flyer advertising a 4-1/2 day short course titled "Far-Field, Anechoic Chamber, Compact, and Near-Field Antenna Measurements". It's at Georgia Tech, December 4-8. It sounds very complete, and should be of interest to anyone professionally involved in antenna measurement. You can see a course description at http://www.conted.gatech.edu/courses/wireless_and_antenna/EE-107.html.

Roy Lewallen, W7EL

1742. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-09 23:50:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BACCC5.F917EE0D@eznec.com>
Source record: 181110

Fractenna wrote:
>
>[Roy Lewallen, W7EL, wrote:]
> >
> >Hate to tell you this, but NEC-2 and the EZNEC program you use (as well
> >as all others), use 20 * log(Field strength ratio) to calculate the dBi
> >gain figures they report(*). Good thing, too. By your definition, the
> >gain of a dipole over isotropic would be 1.07 dB.
> >
> >For one of many examples of the use of 20 * log(field strength ratio) to
> >express gain in dBi, see Kraus, _Antennas_, Second Edition, p. 443.
> >
> >In the far field, field strength (volts/meter or amps/meter) is easily
> >converted to power density (watts/square meter) by using the impedance
> >of the medium (120 * pi ohms for free space). Power densities are
> >converted to dB by using 10 * log(power density ratio). Thus a 20 dB
> >power density change (a factor of 100) corresponds to a 20 dB field
> >strength change (a factor of 10).
> >
> >You might want to go back and re-evaluate some of your antenna gain
> >claims in light of this information.
> >
> >Roy Lewallen, W7EL
> >
> >(*) In NEC-2 and -4, the actual calculation is 10 * log((FS ratio)^2) =
> >20 * log(FS ratio)

>
> Who are you talking to?
>
> NC

This was directed to you, although with the knowledge that it's also
being read by others.

Roy Lewallen, W7EL

1743. Re: Inverted L 80 M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:01:25 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pej9shlf1@slb7.atl.mindspring.net>
Source record: 181116

Bob:

Yes, heres some pointers.

By experiment I found that when laid on the ground or in shallow (approx 1 inch deep) trenches in sandy soil such counterpoises/radials are usually almost 1/2 as short as free space calculations would require (1/4 wave) and so I usually start at about a physical 1/8 wave. I think Reg Edwards told me that he has a program that can calculate the "proper" length of radials laying on typical realistic grounds. I actually "tune" my radials "in situ".

I have done this a few times at a couple of different QTH's and by my operating results it seems to work well.

I usually put out the counterpoises to "fit the lot" and so they are not directly radials stretched straight out from a central point, only some are.

Instead they usually have to follow the house foundation line, garden beds, fence lines, etc...

I usually start with the first one a little longer than I estimated that I need and put it out first.

I then fire up the transmitter on the "desired" frequency, and then I measure the current in that counterpoise/radial at the feedpoint, then go out and cut a few feet off of it. Leave the rest of the wire in the ground though in case you have overcompensated and need to re-attach it. Return to measure the current at the feedpoint and then continue doing this until you reach the length that yeilds maximum current. If you over compensate and cut it too short, simply go out and solder the latest cut back on. Then when you consider it "tuned", go out and pull the rest of the cut off wire out of the ground.

Then go on to the next counterpoise or radial and repeat.

For my "stealth" inverted "L" antennas, I usually put out one tuned such radial/counterpoise per band/frequency that I intend to use. More than this won't hurt anything and may improve operation. In a couple of locations I have done this for up to 5 bands, and thus have put out up to 5 - 10 "tuned" counterpoises. It makes a nice "all band" invisible all band antenna and seems to work well.

Inverted L fed at the base from a good high power tuner fed against several hand "tuned" radial/counterpoises buried in the garden or lawn.

Simple cheap, can be all built and tuned in one Saturday afternoon, about a six pack of beer job.

Usually I have strung the inverted L up a big pine tree or a chimney and
then run it over across the house roof to another tree, etc... I have done
this in two locations where antennas were forbidden by covenant. I used
small guage wire and hid it all in the trees and lawn, ran an "all band" HF
station and no one was any the wiser. I got good signal reports, much
better than from those "store bought" trapped verticals.

The "tuned" radials/counterpoises always seemed to make a big difference in
performance.

I would never buy or use one of those "store bought" all band verticals, use
the cheap high performance tuned inverted L instead.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu> wrote in message
news:8p3fhm$496$5@uni00nw.unity.ncsu.edu...
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
> > BTW... Instead of just cutting the radials/counterpoises to a 1/4 wave
for
> > the bands of interest, I have had great success by "tuning" my
counterpoise
> > radials for maximum current.
>
> > I do this by simply laying them out longer than necessary and then
cutting
> > them off until the current in the radial is maximized. Works wonders
for
> > far field strength.
>
> Peter... do you have any approximate lengths for your counterpoise cuts?
>
> Thanks
>
> Bob/NA4G
>

1744. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:04:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BACFF3.D5E87DC0@eznec.com>
Source record: 181111

Fractenna wrote:
>
> Like I said: acting like a jerk. OK Roy; why don't you document one said 'gain
> claim' that is incorrect. Go ahead. I've got nothing to hide.
>
> NC

But Chip, I didn't say any gain claims were incorrect. Apparently you didn't read my post.

What I did say is that because you have such a fundamental misunderstanding of the use of dB to describe field strength ratios, I would look carefully at any gain claims you might make. If you applied your faulty dB calculations to measured or caclulated field strengths, the results would be in error. For example, you would conclude that increasing the power to an antenna by 3 dB would increase the field strength by 1.5 dB. Or let's take the same numbers which started this whole thing. To increase the field strength from an antenna from 3 to 27.5 V/m would require increasing the power fed to the antenna by 19.24 dB. Yet you have said that the field strength difference is only about 10 dB. And you stand by your statement. So there's also a likelihood that this reasoning will also be applied in the future. If it is, the results will be incorrect.

Roy Lewallen, W7EL

1745. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:05:33 UTC
From: k1bqt@aol.com
Message-ID: <20000909200533.08295.00000536@ng-mf1.aol.com>
Source record: 181114

>Just shut up.<

What???

Rick K1BQT

1746. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:05:34 UTC
From: fractenna@aol.com
Message-ID: <20000909200534.29749.00000034@ng-cc1.aol.com>
Source record: 181113

>> >Hate to tell you this, but NEC-2 and the EZNEC program you use (as well
>> >as all others), use 20 * log(Field strength ratio) to calculate the dBi
>> >gain figures they report(*). Good thing, too. By your definition, the
>> >gain of a dipole over isotropic would be 1.07 dB.
>> >
>> >For one of many examples of the use of 20 * log(field strength ratio) to
>> >express gain in dBi, see Kraus, _Antennas_, Second Edition, p. 443.
>> >
>> >In the far field, field strength (volts/meter or amps/meter) is easily
>> >converted to power density (watts/square meter) by using the impedance
>> >of the medium (120 * pi ohms for free space). Power densities are
>> >converted to dB by using 10 * log(power density ratio). Thus a 20 dB
>> >power density change (a factor of 100) corresponds to a 20 dB field
>> >strength change (a factor of 10).
>> >
>> >You might want to go back and re-evaluate some of your antenna gain
>> >claims in light of this information.
>> >
>> >Roy Lewallen, W7EL
>> >
>> >(*) In NEC-2 and -4, the actual calculation is 10 * log((FS ratio)^2) =
>> >20 * log(FS ratio)
>
>>
>> Who are you talking to?
>>
>> NC
>
>This was directed to you, although with the knowledge that it's also
>being read by others.
>
>Roy Lewallen, W7EL
>
>

This is an outrageous piece of propaganda. It has no accuracy or rlevancy to
even a remote attempt of extrapolation from my comment to W1RFI's post.

Put simply it is not only wrong, but targetted to be destructive.

What exactly, Mr. Lewallen, is your agenda in this ?

NC

1747. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:07:32 UTC
From: fractenna@aol.com
Message-ID: <20000909200732.29749.00000035@ng-cc1.aol.com>
Source record: 181115

>Dr Cohen,
>
>I would love to see your creations and meet you, but my wife Robin, KE6MRH,
>is a quadriplegic so doesn't travel and I can't leave her alone. But thanks
>for the offer.
>
>Mike Camp KI7FQ
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000909182828.21490.00000025@ng-fy1.aol.com...
>> >
>> >Dr. Cohen,
>> >
>> >Do you own the street?
>> >
>> >Sincerely Curious,
>> >
>> >Mike Camp KI7FQ (Only BS)
>> >
>> >

Hi Mike--

I wish you and her well, and if you have anything you think I can help with on antenna info, feel free to correspond via e-mail; I will happily reply.

Best Wishes,
Chip N1IR

1748. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:09:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAD14B.260AC06F@eznec.com>
Source record: 181112

Those of us who have been on the newsgroup for a while have all learned to be cautious. The only reason I bother posting in response is that people who don't know his track record might be misled. Certainly, I and all veteran readers know that no matter what anyone says, Chip won't ever, ever, change his mind or admit to an error, no matter how obvious or well documented it is. So any posting trying to convince him of anything is a total waste of time and effort. But hopefully the lurkers will learn from both the tone and content of the resulting exchanges.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> In light of behavior patterns as exhibited here on this NG by Chip, it is my
> opinion that anything he states must be taken under the old Roman dictum of
> "caveat emptor".
>
> I presume that he sincerely believes in his heart that he is "right" all of
> the time, but God help those who join his bandwagon without question!
>
> Thoughts, comments?
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC

1749. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:10:28 UTC
From: fractenna@aol.com
Message-ID: <20000909201028.29749.00000036@ng-cc1.aol.com>
Source record: 181117

>Just curious...
>
>Why would Chip deliberately schedule an open house at his place when the
>"latter day saints" are holding a big open house right next door?
>
>Who was first to announce? The saints or Chip?
>
>Anybody know?
>
> Peter K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC
>--
>Fractenna <fractenna@aol.com> wrote in message
>news:20000909182828.21490.00000025@ng-fy1.aol.com...
>> >
>> >Dr. Cohen,
>> >
>> >Do you own the street?
>> >
>> >Sincerely Curious,
>> >
>> >Mike Camp KI7FQ (Only BS)
>> >
>> >
>> >"Fractenna" <fractenna@aol.com> wrote in message
>> >news:20000909083647.20824.00000081@ng-fl1.aol.com...
>> >> Greetings--
>> >>
>> >> I will be holding an open house from 10-1 on Saturday, Sept 16,2000
>with
>> >my
>> >> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
>> >> (see ham page of
>> >>
>> >> http://www.fractenna.com)
>> >>
>> >> will be up for operating from N1IR. I will also have my station logs
>> >> available for viewing the many successful 10M QSO runs I have
>experienced
>> >wit
>> >> the FQY.

>> >>
>> >> Please let me know by 12 Sept if you wish to attend; attendance will be
>> >> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
>> >unuathorized
>> >> cars will be towed due to restricted street parking. And please bring
>your
>> >> license if you wish to operate.
>> >>
>> >> I regret that some individuals will not be permitted to attend, due to
>> >their
>> >> previous on-line behavior.
>> >>
>> >> I am located in Belmont, MA, next to the new Boston Temple of the
>Mormons.
>> >I am
>> >> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions
>to
>> >> those attending by 15 Sept.
>> >>
>> >> Hope to see you then.
>> >>
>> >> 73
>> >> Chip N1IR
>> >>

Because the Temple Open House goes on until the end of September; October brings contest weekends and travel schedules for the remaining fall; and because I planned it back in My--before I knew about the LDS Open House. Finally, because no one has asked us to in any way compromise our enjoyment of life because of our neighbor's exciting events. Good luck LDS folks and congrats!

73
Chip N1IR

1750. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:12:14 UTC
From: k1bqt@aol.com
Message-ID: <20000909201214.08295.00000537@ng-mf1.aol.com>
Source record: 181019

Join his civil action to disrupt the Mormon Temple's open house by congesting the street and blocking traffic. Chip, you aren't considering using NG members for alterior motives are you?? Say it ain't so!

Rick K1BQT

1751. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:12:59 UTC
From: fractenna@aol.com
Message-ID: <20000909201259.29749.00000037@ng-cc1.aol.com>
Source record: 181118

>What I did say is that because you have such a fundamental
>misunderstanding of the use of dB to describe field strength ratios,

Stop right there. That is incorrect. Furthermore it has aboslutely NO RELEVANCE or BEARING.

Demonstrate JUST ONCE that I HAVE INCORRECTLY REPORTED a field strength measurement or model value.

Just once.

Show how my value differs from yours.

This is a deliberate diversion which you produced to undermine me and Fractal Antenna Systems,Inc.

NC

1752. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:14:48 UTC
From: fractenna@aol.com
Message-ID: <20000909201448.29749.00000038@ng-cc1.aol.com>
Source record: 181021

> And you are wrong.
>

No sir;

I am not.

Regards,

NC

1753. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:16:21 UTC
From: sideband <sideband@cac.net>
Message-ID: <efklrs46apeppljap76s8ofkh64so9a6bh@4ax.com>
Source record: 181020

Whate ever happened to "No more public talks for HAMs" or whatever the
other posting was about?

Or maybe he's edited and printed out excerpts from this NG, and
convinced the police in his area that he's being "stalked" online, and
this is just a trap to lure the unsuspecting out so that they may have
a police record, which would give Chip the ability to say things like,
"Your opinions are unimportant, you are a criminal."

Hrm... Just food for thought.

-SSB

On or about 09 Sep 2000 12:36:47 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:Greetings--
:
:I will be holding an open house from 10-1 on Saturday, Sept 16,2000 with my
:fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal Flyer
: (see ham page of
:
: http://www.fractenna.com)
:
: will be up for operating from N1IR. I will also have my station logs
:available for viewing the many successful 10M QSO runs I have experienced wit
:the FQY.
:
:Please let me know by 12 Sept if you wish to attend; attendance will be
:limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as unuathorized
:cars will be towed due to restricted street parking. And please bring your
:license if you wish to operate.
:
:I regret that some individuals will not be permitted to attend, due to their
:previous on-line behavior.
:
:I am located in Belmont, MA, next to the new Boston Temple of the Mormons. I am
:5 minutes from 95 (128) and adjacent to Rt 2. I will forward directions to
:those attending by 15 Sept.
:
:Hope to see you then.
:
:73
:Chip N1IR
:

1754. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:18:13 UTC
From: fractenna@aol.com
Message-ID: <20000909201813.29900.00000024@ng-cc1.aol.com>
Source record: 181022

>Join his civil action to disrupt the Mormon Temple's open house by congesting
>the street and blocking traffic. Chip, you aren't considering using NG
>members
>for alterior motives are you?? Say it ain't so!
>
>Rick K1BQT
>

What a cruel thing you have said Rick. On the contrary, I will indeed
control--who and when folks come to the open house.

NC

1755. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:20:08 UTC
From: 2w8ji@contesting.com
Message-ID: <39bad359.53804577@news.akorn.net>
Source record: 181023

On 10 Sep 2000 00:12:14 GMT, k1bqt@aol.com (K1BQT) wrote:

>Join his civil action to disrupt the Mormon Temple's open house by congesting
>the street and blocking traffic. Chip, you aren't considering using NG members
>for alterior motives are you?? Say it ain't so!
>
>Rick K1BQT

Amazing. Chip doesn't do anything without finding some way to be an
ass to someone!

Now he's after the Mormons!!!! Amazing!

What a user!

73 Tom

1756. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:21:35 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8pekfmjms1@slb7.atl.mindspring.net>
Source record: 181027

Chip:

Thanks, I know from personal experience that sometimes the LDS can be "annoying", but it usually doesn't last long if you let them know they are doing it.

I have worked with, and have hired and supervised, several LDS Engineering graduates who graduated from the EE programs at BYU and U of Utah.

As an educator you might be interested in the following observations.

IMHO... opinion those two schools which contain a preponderance of LDS students produce excellent Engineering graduates and the folks who graduated from those programs that I have worked with had some of the best work ethic I have ever seen in the Engineering community.

Those two schools have simply great undergraduate Engineering programs, others would do well to model their programs after them.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000909201028.29749.00000036@ng-cc1.aol.com...
> >Just curious...
> >
> >Why would Chip deliberately schedule an open house at his place when the
> >"latter day saints" are holding a big open house right next door?
> >
> >Who was first to announce? The saints or Chip?
> >
> >Anybody know?
> >
> > Peter K1PO
> >
> >--
> >Peter O. Brackett
> >Morrisville, NC
> >--
> >Fractenna <fractenna@aol.com> wrote in message
> >news:20000909182828.21490.00000025@ng-fy1.aol.com...
> >> >
> >> >Dr. Cohen,

> >> >
> >> >Do you own the street?
> >> >
> >> >Sincerely Curious,
> >> >
> >> >Mike Camp KI7FQ (Only BS)
> >> >
> >> >
> >> >"Fractenna" <fractenna@aol.com> wrote in message
> >> >news:20000909083647.20824.00000081@ng-fl1.aol.com...
> >> >> Greetings--
> >> >>
> >> >> I will be holding an open house from 10-1 on Saturday, Sept 16,2000
> >with
> >> >my
> >> >> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal
Flyer
> >> >> (see ham page of
> >> >>
> >> >> http://www.fractenna.com)
> >> >>
> >> >> will be up for operating from N1IR. I will also have my station log
s
> >> >> available for viewing the many successful 10M QSO runs I have
> >experienced
> >> >wit
> >> >> the FQY.
> >> >>
> >> >> Please let me know by 12 Sept if you wish to attend; attendance will
be
> >> >> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE PRESENT as
> >> >unuathorized
> >> >> cars will be towed due to restricted street parking. And please
bring
> >your
> >> >> license if you wish to operate.
> >> >>
> >> >> I regret that some individuals will not be permitted to attend, due
to
> >> >their
> >> >> previous on-line behavior.
> >> >>
> >> >> I am located in Belmont, MA, next to the new Boston Temple of the
> >Mormons.
> >> >I am
> >> >> 5 minutes from 95 (128) and adjacent to Rt 2. I will forward
directions
> >to
> >> >> those attending by 15 Sept.
> >> >>

> >> >> Hope to see you then.
> >> >>
> >> >> 73
> >> >> Chip N1IR
> >> >>
>
> Because the Temple Open House goes on until the end of September; October
> brings contest weekends and travel schedules for the remaining fall; and
> because I planned it back in My--before I knew about the LDS Open House.
> Finally, because no one has asked us to in any way compromise our
enjoyment of
> life because of our neighbor's exciting events. Good luck LDS folks and
> congrats!
>
> 73
> Chip N1IR

1757. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:23:37 UTC
From: fractenna@aol.com
Message-ID: <20000909202337.29900.00000026@ng-cc1.aol.com>
Source record: 181024

>Those of us who have been on the newsgroup for a while have all learned
>to be cautious. The only reason I bother posting in response is that
>people who don't know his track record might be misled. Certainly, I and
>all veteran readers know that no matter what anyone says, Chip won't
>ever, ever, change his mind or admit to an error, no matter how obvious
>or well documented it is. So any posting trying to convince him of
>anything is a total waste of time and effort. But hopefully the lurkers
>will learn from both the tone and content of the resulting exchanges.
>
>Roy Lewallen, W7EL
>
>"Peter O. Brackett" wrote:
>>

Well Mr. Lewallen, I am prepared to aptly demonstrate that your premise is incorrect, and thus your motivationn is, at least ,suspect.

I can, and will, deliberately re-post a where I not only ADMITTED and error, but CORRECTED it.

I will, in doing so, require your public apology for said outraegous and incoorect characterization.

Do you state, without any hestitation, that your statement is correct and thus any evidence to the contrary will produce said apology?

NC

1758. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:25:52 UTC
From: 2w8ji@contesting.com
Message-ID: <39bad3c9.53917367@news.akorn.net>
Source record: 181025

On 09 Sep 2000 18:41:30 GMT, w1rfi@aol.com (W1RFI) wrote:

>
>Now, are you talking voltage efficiency or power efficiency? :-)
>
>73,
>Ed Hare, W1RFI

Good one Ed. Now that we are all corrected, we will have to define
voltage or current efficiency, and power efficiency.

73 Tom

1759. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:26:35 UTC
From: fractenna@aol.com
Message-ID: <20000909202635.29900.00000027@ng-cc1.aol.com>
Source record: 181026

>
>On 10 Sep 2000 00:12:14 GMT, k1bqt@aol.com (K1BQT) wrote:
>
>>Join his civil action to disrupt the Mormon Temple's open house by
>congesting
>>the street and blocking traffic. Chip, you aren't considering using NG
>members
>>for alterior motives are you?? Say it ain't so!
>>
>>Rick K1BQT
>
>Amazing. Chip doesn't do anything without finding some way to be an
>ass to someone!
>
>Now he's after the Mormons!!!! Amazing!
>
>What a user!
>
>73 Tom
>

To my LDS friends and neighbors:

Please be aware that I have initiated a lawsuit against Thomas Rauch based upon his libelous and harassing comments, which now have been an onus for 5 years.

His statements in no way represent the opinions or actions of me or my family.

With Best Wishes,

Nathan Cohen

1760. Re: Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:26:55 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39bad3d4.291159766@news.azstarnet.com>
Source record: 181028

On Sat, 09 Sep 2000 16:37:33 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>I just got a flyer advertising a 4-1/2 day short course titled
>"Far-Field, Anechoic Chamber, Compact, and Near-Field Antenna
>Measurements". It's at Georgia Tech, December 4-8. It sounds very
>complete, and should be of interest to anyone professionally involved in
>antenna measurement. You can see a course description at
>http://www.conted.gatech.edu/courses/wireless_and_antenna/EE-107.html.
>
>Roy Lewallen, W7EL

Maybe we should all "chip" in and send Nate. He might learn something and it would give the group a respite from his posts for five days. But then we might have to send Phil and Cohendog too... This could get expensive.

Do they have a group or family discount?

Wes Stewart N7WS

1761. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:33:43 UTC
From: 2w8ji@contesting.com
Message-ID: <39bad53e.54289527@news.akorn.net>
Source record: 181029

On 09 Sep 2000 22:34:08 GMT, w1rfi@aol.com (W1RFI) wrote:

>The NEC model has been around for years, and as far as I know, I have not heard
>of any such poor correlation for vertical antennas. OTOH, any feed line
>problem, or antenna problem, would certainly be reflected in the SWR and I
>really can't see what would have to be about 6 dB of loss in the feedline, not
>at all probable. Still, have you ever measured the power at the top of the
>tower?

Haven't measured power up there. You can bet that I won't either!

>Man, you spent a fortune in feedline alone; I can see why you are disappointed.

Well, just this morning the dipole tied the vertical. No difference.

NEC could be fine. It could be the wave is mostly vertical, or it
could be the wave angle is low.

Let me toss something out. Don't some of the NEC engine programs
calculate FS at extreme distances? Are those distances approaching the
height of the ionosphere? Do they consider the earth flat?

What about the distance used to describe the pattern. Could it be too
far away for the real world?

73 Tom

1762. Re: Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:41:52 UTC
From: fractenna@aol.com
Message-ID: <20000909204152.00149.00000024@ng-cc1.aol.com>
Source record: 181030

>Maybe we should all "chip" in and send Nate. He might learn something and it
>would give the group a respite from his posts for five days. But then we
>might
>have to send Phil and Cohendog too... This could get expensive.
>
>Do they have a group or family discount?
>
>Wes Stewart N7WS
>

I'd love to go. This sounds like a great idea!

Take up a collection and I will gratefully acknowledge my benefactors!

I can also time it with a legal visit somewhat south of Atlanta.

Best
Chip N1IR

1763. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:42:54 UTC
From: fractenna@aol.com
Message-ID: <20000909204254.00149.00000025@ng-cc1.aol.com>
Source record: 181031

>Chip:
>
>Thanks, I know from personal experience that sometimes the LDS can be
>"annoying", but it usually doesn't last long if you let them know they are
>doing it.
>
>I have worked with, and have hired and supervised, several LDS Engineering
>graduates who graduated from the EE programs at BYU and U of Utah.
>
>As an educator you might be interested in the following observations.
>
>IMHO... opinion those two schools which contain a preponderance of LDS
>students produce excellent Engineering graduates and the folks who graduated
>from those programs that I have worked with had some of the best work ethic
>I have ever seen in the Engineering community.
>
>Those two schools have simply great undergraduate Engineering programs,
>others would do well to model their programs after them.
>
> Peter K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC
>--
>Fractenna <fractenna@aol.com> wrote in message
>news:20000909201028.29749.00000036@ng-cc1.aol.com...
>> >Just curious...
>> >
>> >Why would Chip deliberately schedule an open house at his place when the
>> >"latter day saints" are holding a big open house right next door?
>> >
>> >Who was first to announce? The saints or Chip?
>> >
>> >Anybody know?
>> >
>> > Peter K1PO
>> >
>> >--
>> >Peter O. Brackett
>> >Morrisville, NC
>> >--
>> >Fractenna <fractenna@aol.com> wrote in message
>> >news:20000909182828.21490.00000025@ng-fy1.aol.com...

>> >> >
>> >> >Dr. Cohen,
>> >> >
>> >> >Do you own the street?
>> >> >
>> >> >Sincerely Curious,
>> >> >
>> >> >Mike Camp KI7FQ (Only BS)
>> >> >
>> >> >
>> >> >"Fractenna" <fractenna@aol.com> wrote in message
>> >> >news:20000909083647.20824.00000081@ng-fl1.aol.com...
>> >> >> Greetings--
>> >> >>
>> >> >> I will be holding an open house from 10-1 on Saturday, Sept 16,2000
>> >with
>> >> >my
>> >> >> fractal-equipped station. Both the 10M FQY and the 20M K2 Fractal
>Flyer
>> >> >> (see ham page of
>> >> >>
>> >> >> http://www.fractenna.com)
>> >> >>
>> >> >> will be up for operating from N1IR. I will also have my station log
>s
>> >> >> available for viewing the many successful 10M QSO runs I have
>> >experienced
>> >> >wit
>> >> >> the FQY.
>> >> >>
>> >> >> Please let me know by 12 Sept if you wish to attend; attendance will
>be
>> >> >> limited. Also, PLEASE LET ME KNOW WHAT TIME YOU WILL BE P

Excuse me--

You are making a DELIBERATE effort to project an attitude exactly the opposite of how I feel.

NC

1764. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:45:11 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39BAD997.E8AAEB47@dialpoint.net>
Source record: 181042

I have no problem with what you have stated. Now all we have to do is
to get the antenna makers to decide what DB they are using. One even
adds the ground reflection gain as an antenna modling program predicts
to a vhf beam for added advertising gain.

Fractenna wrote:
>
> I will be brief and to the point--accurate and honest.
>
> A dB is a means of representing the logarithm of the ratio of two quantities.
> In most EE applications, those quantities are power, or are meant to relate to
> power ratios as extrapolated from the observable--such as voltage.
>
> However--
>
> It has become common practice to adopt the dB scale in cases where POWER is NOT
> being discussed. It becomes a convenient representation to indicate dynamic
> range or change of two quantities of the same observable.[Ed, W1RFI, indeed
> uses it for power density. This is NOT power.]
>
>

1765. Re: DDRR: Why does the ARRL continue publishing this turkey?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:46:31 UTC
From: 2w8ji@contesting.com
Message-ID: <39bad914.55272232@news.akorn.net>
Source record: 181032

On 09 Sep 2000 22:14:21 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>Now: if we were talking about a normal mode helix, and I mentioned, in context
>the point that there are other modes, and then someone made a point about the
>normal mode again, should you ALSO introduce this non sequaitar again>
>
>Please explain to this group how the re-post was relevant.
>
>73
>Chip N1IR

I'll have a crack at it.

The post is "relevant" because it shows how you contradict yourself
from day to day, while poking it out at other people.

73 Tom

1766. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:48:10 UTC
From: 2w8ji@contesting.com
Message-ID: <39bad9ef.55491059@news.akorn.net>
Source record: 181033

On 09 Sep 2000 21:10:12 GMT, k1bqt@aol.com (K1BQT) wrote:

>Throw the cat inside. If, in 20 minutes, the cat's comfortably snoozing, the
>light's been on. If, in 20 minutes, the cat has caught a mouse, it's been off.
>
>Rick K1BQT

I have a serious question.

How can you tell the difference between Chip and a refrigerator?

Anyone?

1767. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:52:09 UTC
From: 2w8ji@contesting.com
Message-ID: <39bada7a.55630293@news.akorn.net>
Source record: 181034

On 09 Sep 2000 19:29:13 GMT, fractenna@aol.com (Fractenna) wrote:

>Fun!
>
>Just worked country 310 on 10M with the 10M fractal quad yagi (see:
>
>http://www.fractenna.com/ham/hampage1.html
>
>8Q7XX, first call!
>
>73,
>Chip N1IR

More cleverly worded bullcrap.

Read carefully folks. What he is saying is over the past many years on all bands, he has managed to work 310 countries (big deal) using other antennas.

Now he worked one new DX station with his pathetic FQY, and want's us to believe he did it with one call.

73 Tom

1768. Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 00:55:59 UTC
From: fractenna@aol.com
Message-ID: <20000909205559.00149.00000030@ng-cc1.aol.com>
Source record: 181035

I will be brief and to the point--accurate and honest.

A dB is a means of representing the logarithm of the ratio of two quantities. In most EE applications, those quantities are power, or are meant to relate to power ratios as extrapolated from the observable--such as voltage.

However--

It has become common practice to adopt the dB scale in cases where POWER is NOT being discussed. It becomes a convenient representation to indicate dynamic range or change of two quantities of the same observable.[Ed, W1RFI, indeed uses it for power density. This is NOT power.]

If one wants to COMPARE TWO VOLTAGE DENSITIES as a DIFFERENCE--such as Ed discusses-- then there is neither relevance nor accuracy in discussing POWER.

If there is an order of magnitude difference in two VOLTAGES, this is a 10 dB difference between the two. But it also represents a 20dB difference in POWER when extrapolated to such.

I hope that people understand where the 10 and 20 come from in the log formula--the 20 is used when voltages or currents are measured--and a POWER ratio is being considered (you have to square in Ohm's law to get powers, thus squaring raises the 10 to a 20). Otherwise, to indicate a sense of the dynamic range of the observables alone, the 10 is used.

I am deeply troubled that the dB scale has become some sort of memorized hocus pocus, as opposed to a simply derived and useful idea..

All I have just said rerpises and slightly expands what I have already proffereed; glad to be of help.

73
Chip N1IR

1769. Two reflectors- again!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:09:14 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39BADF3A.953F4274@hiwaay.net>
Source record: 181036

Last week (subj:"Unwin lives") I reported on the results of EZNEC runs on Arts' double reflector, long boom antenna. This was just a few runs, using the great (intuitive feed) EZNEC Windows program, and the two files that had been prepared by Roy from Arts' input.

In summary- the high front-to-back ratio (~40) on both single and double reflector models, the effect that the second reflector had on bringing the SWR WAY down, and the double nodes (15 and 45 degrees) and deep null (30 degrees). All-in-all, a very interesting exercise.

THe big difference between the 'free space' and 'real ground' runs was, as expected, in the pattern distribution. The lobes of the 'real ground runs were quit useable, but probably far from the best. Art had used a height of 820 inches in his original file.

Tom, N4KG, a pretty good all-band DXer from just to my west, is always glad to tell people that 'higher is not always better'. Following this, I used the easy change features of the input of EZNEC, and tried several different heights. I am glad I did- the results are good enough to lead me to explore this some more.

The bottom line is that the second (upper) lobe almost disappears at lower heights, the low SWR is preserved, and the F/B goes up to about 50, at a height of 400 inches. The major lode is at about 20 degrees, and can be varied by height changes.

My look-see is far from complete, but Art appears to have a pretty good, well matched antenna. It will be interesting to see what the real version does. Maybe I can get him to try it lower.

Bill-W4BSG

1770. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:15:44 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <0cnep8.dp4.ln@mail.specsol.com>
Source record: 181038

W1RFI <w1rfi@aol.com> wrote:
>>From: Jim Pennino

>>It is quite relevent to compare ANY two measurements (in the same units) and
>>give the ratio as dB. It is also common engineering practice.

> I don't recall that I have ever seen dB used in a context that was not related
> to power, other than seeing it sometimes used incorrectly to compare voltages
> measured in different impedances, or perhaps rarely to compare some specific
> amplitude, such as the amount of movement in a shake table. For example, I
> have never seen one say that there is 3 dB more water in one jar than another,
> or discuss a 3 dB change in velocity or a 3 dB change in resistance.

> Can you give us examples of the proper use of dB in contexts other than
> amplitude or power?

>>Expressing ratio in terms of dB does NOT imply you are comparing power.

> Unless I am wrong, the definition of the Bel is a power ratio. Anyone have an
> IEEE dictionary handy? I am at home and don't have one.

>>One does need to take care to apply the correct multiplier, i.e. 20, if the
>>base unit is Volts, as in V/m.

> I have never seen any multiplier other than 10 for power or amplitude^2 or 20
> for amplitude. Can you provide any examples of others?

> 73,
> Ed Hare, W1RFI

OK, here's one with a reference; lot's of fields other than electronics use
dB.

"0db SPL is a wave whose rms pressure is 0.0002ubar (a bar is 10^6 dynes per
square centimeter, approximately 1 atmosphere)"

From: The Art of Electronics, Horowitz and Hill

This is, BTW, a good book to own.

To be pendatic, you are correct when you question contexts other than amplitude
or power. But there are other "things" that have amplitude besides Volts.

Jim Pennino

1771. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:16:43 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8peoj3vda1@nntp9.atl.mindspring.net>
Source record: 181040

W1RFI wrote in message <20000909111653.20761.00000397@ng-cf1.aol.com>...
>>From: 2w8ji@contesting.com (Tom W8JI)
>
>>I'm afraid without actually going inside the refigerator and watching,
>>or installing sensors to measure the actual changes, you really can't
>>be absolutely sure the light goes off.
>
>Could we judge by looking at the pupil dilation of the giraffe or the
elephant?
>:-)
>
>73,
>Ed Hare, W1RFI

I don't think that can be done. According to the latest available
information, all of the animals have been called to a meeting!

Dean Craft -- W4IHK

1772. Re: Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:25:52 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39bad931.292533629@news.azstarnet.com>
Source record: 181037

On 10 Sep 2000 00:41:52 GMT, fractenna@aol.com (Fractenna) wrote:

>>Maybe we should all "chip" in and send Nate. He might learn something and it
>>would give the group a respite from his posts for five days. But then we
>>might
>>have to send Phil and Cohendog too... This could get expensive.
>>
>>Do they have a group or family discount?
>>
>>Wes Stewart N7WS
>>
>
>
>I'd love to go. This sounds like a great idea!
>
>Take up a collection and I will gratefully acknowledge my benefactors!
>
>I can also time it with a legal visit somewhat south of Atlanta.
>
>Best
>Chip N1IR

Well on second thought, with your connections, I'm sure you could get a government grant to pay your way. Of course, we are the government--at least at pay-up time--so I guess we would have to pony up either way.

But there is a third option. You pay your own way since you want to visit Tom's place anyway. And while you're there---since he's needing someone to carry a power meter to the top of his 300 foot tower to make some 10*log (p1/p2) measurements for Ed Hare---maybe you could volunteer.

I sure Tom would be happy to have you do it. He'll loan you the used climbing belt he just bought on eBay and I'll bet that with only a little encouragement, Tom could be induced to key his "experimental" 10 KW rig while you are up top so that you could test your new-found knowledge of "near-field" measurements. I believe that a cooperative effort like this is just what is needed to patch up the differences you fellows have with each other.

Additionally, if your climb happened to coincide with one of Georgia's famed thunderstorms, you could test the veracity of some of Tom's claims about lightning protection and grounding. I imagine that a physicist with your credentials would "jump" at this opportunity.

What say guys?

Wes N7WS

1773. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:35:02 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8peoj4vda2@nntp9.atl.mindspring.net>
Source record: 181041

Peter O. Brackett wrote in message <8pdahi$4rl$1@slb6.atl.mindspring.net>...
>Richard:
>
>Come on you shiftless, lazy freeloader, spend a few hours and learn the
code
>like the rest of us.
>
>Who the hell do you think you are?
>
>If Nathan can get a Ph.D. from an Ivy League School, then surely you can
>pass the Morse test!
>
>What???
>
>Hope this helps with the Morse Code studies.
>
> Peter (If I passed the test anyone can!) K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC
>--

No, No, Peter; you don't understand. In the good old US of A, it is unacceptable for anyone to have something which someone else does not have. Therefore, anytime anyone works his butt off and acquires something the old fashioned and honest way, automatically there are those who step forward and claim the same prize. Most often society, and in recent years our government, agrees and declares that the claimant will also have the same reward.

I saw a post just recently where someone actually claimed the government kept them out of ham radio for some great number of (was it 40?) years because the government had requirements relative to receiving a ham license!

We are very close to the long projected and expected status of things being run by the freebanders!

Dean Craft -- W4IHK
w4ihk@mindspring.com

1774. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:35:19 UTC
From: richardharrison@webtv.net
Message-ID: <5319-39BAE557-42@storefull-114.iap.bryant.webtv.net>
Source record: 181048

Chip, N1IR wrote:
"If you are using voltage ratios or current ratios to get power ratios
then obviously there is a 20 log factor involved."

Volts per meter have exactly the same relationship to watts per square meter as
volts have to watts. Chip`s point may be that meters versus square meters are not the same as volts versus watts. He is mistaken if he thinks this is significant in our discussion.

From the inventors of te decibel, AT&T, and their Principles of Electricity",
"---the new unit, called the decibel (abreviated "db"), represents always a fixed percentage reduction in power no matter what frequency is involved.----
No. of db = N = 10 log P1 / Po
or
N = 20 log I1 / Io
Although in the above we have been considering the decibel in connection with measurements of loss or attenuation, it is equally useful in the measurement of gain such as that given by a telephone repeater.----"

John Cunningham in "The Complete Broadcast Handbook" is plain spoken. He says:
Voltage is equal to the square root of the power times the resistance. Thus we can say that the field intensity in volts per meter is given by the square root of the watts per square meter, then multiplied by 377 ohms.

Best regards, Richard Harrison, KB5WZI

1775. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:37:17 UTC
From: sideband <sideband@cac.net>
Message-ID: <ucplrs0i7ev8kl9cqah71f38dr410r672c@4ax.com>
Source record: 181039

:Do you state, without any hestitation, that your statement is correct and thus
:any evidence to the contrary will produce said apology?
:
:NC

Probably about the time chip admits he's wrong, the second coming will
have happened, and he'll be doing it with the strong scent of sulphur
in his nostrils.

Just my two cents.

-SSB

1776. Re: FRACTAL ANTENNA: N1IR Open House 16 Sept

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:41:29 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8peot9$353$1@iac5.navix.net>
Source record: 181044

This from the same guy who is so quick to scream anti-Semite...

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message
news:20000909202635.29900.00000027@ng-cc1.aol.com...
> >
> >On 10 Sep 2000 00:12:14 GMT, k1bqt@aol.com (K1BQT) wrote:
> >
> >>Join his civil action to disrupt the Mormon Temple's open house by
> >congesting
> >>the street and blocking traffic. Chip, you aren't considering using NG
> >members
> >>for alterior motives are you?? Say it ain't so!
> >>
> >>Rick K1BQT
> >
> >Amazing. Chip doesn't do anything without finding some way to be an
> >ass to someone!
> >
> >Now he's after the Mormons!!!! Amazing!
> >
> >What a user!
> >
> >73 Tom
> >
>
> To my LDS friends and neighbors:
>
> Please be aware that I have initiated a lawsuit against Thomas Rauch based
upon
> his libelous and harassing comments, which now have been an onus for 5
years.
>
> His statements in no way represent the opinions or actions of me or my
family.
>
> With Best Wishes,
>
> Nathan Cohen

1777. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:43:25 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pep0s$37l$1@iac5.navix.net>
Source record: 181046

You are still wrong and all the weasel words in the world are not going to change it.

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000909205559.00149.00000030@ng-cc1.aol.com...
> I will be brief and to the point--accurate and honest.
>
> A dB is a means of representing the logarithm of the ratio of two quantities.
> In most EE applications, those quantities are power, or are meant to relate to
> power ratios as extrapolated from the observable--such as voltage.
>
> However--
>
> It has become common practice to adopt the dB scale in cases where POWER is NOT
> being discussed. It becomes a convenient representation to indicate dynamic
> range or change of two quantities of the same observable.[Ed, W1RFI, indeed
> uses it for power density. This is NOT power.]
>
> If one wants to COMPARE TWO VOLTAGE DENSITIES as a DIFFERENCE--such as Ed
> discusses-- then there is neither relevance nor accuracy in discussing POWER.
>
> If there is an order of magnitude difference in two VOLTAGES, this is a 10 dB
> difference between the two. But it also represents a 20dB difference in POWER
> when extrapolated to such.
>
> I hope that people understand where the 10 and 20 come from in the log
> formula--the 20 is used when voltages or currents are measured--and a POWER
> ratio is being considered (you have to square in Ohm's law to get powers, thus
> squaring raises the 10 to a 20). Otherwise, to indicate a sense of the dynamic

> range of the observables alone, the 10 is used.
>
>
> I am deeply troubled that the dB scale has become some sort of memorized
hocus
> pocus, as opposed to a simply derived and useful idea..
>
> All I have just said rerpises and slightly expands what I have already
> proffereed; glad to be of help.
>
> 73
> Chip N1IR

1778. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:45:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAE7BA.543AF4F0@eznec.com>
Source record: 181043

Tom W8JI wrote:

> . . .

> Let me toss something out. Don't some of the NEC engine programs
> calculate FS at extreme distances? Are those distances approaching the
> height of the ionosphere? Do they consider the earth flat?

NEC considers the Earth to be flat and infinite in extent. The far field is calculated at an infinite distance. (As I recall, MININEC uses an actual distance of 10,000 km.) I don't think the height of the ionosphere should have any bearing on the results.

> What about the distance used to describe the pattern. Could it be too
> far away for the real world?

I don't think so. The shape of the field is pretty much the same at a wavelength or two as it is an infinite distance away. So choose any distance within that range, and the shape won't change appreciably.

A number of users have noticed that the ground wave results reported by NEC (and EZNEC pro) diverge from the FCC curves beginning at about 100 km. This is due to the flat-Earth approximation. But the standard version of EZNEC only reports the sky wave, and I don't think the ground wave is important to the questions being asked here. Certainly by the time you get a couple of hundred miles away, including the ground wave would make no appreciable difference to the result.

Roy Lewallen, W7EL

1779. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:46:05 UTC
From: sideband <sideband@cac.net>
Message-ID: <poplrs0vhr6n2lmk9c6ep11keaao7pkhvq@4ax.com>
Source record: 181047

On or about Sun, 10 Sep 2000 00:48:10 GMT, 2w8ji@contesting.com (Tom W8JI), using the forum rec.radio.amateur.antenna did say:
:
:I have a serious question.
:
:How can you tell the difference between Chip and a refrigerator?
:
:Anyone?

1. It's easy to find out how a refigerator operates.
2. Almost anyone can open a refrigerator.
3. The lightbulb in the refrigerator actually comes on once in awhile.
4. The refrigerator has a purpose that most anyone can agree upon.
5. The refrigerator behaves exactly the same way every time, unless something is wrong with it.
6. When something is wrong with a refrigerator, it can either be fixed, or thrown away and a new refrigerator obtained.
7. If you don't like its color, you can paint it.
8. Most people appreciate a refrigerator.

I'm sure I'll think of more.

73's

-SSB

1780. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:48:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAE86A.9E7CCA57@eznec.com>
Source record: 181045

Fractenna wrote:
>
> >> >Hate to tell you this, but NEC-2 and the EZNEC program you use (as well
> >> >as all others), use 20 * log(Field strength ratio) to calculate the dBi
> >> >gain figures they report(*). Good thing, too. By your definition, the
> >> >gain of a dipole over isotropic would be 1.07 dB.
> >> >
> >> >For one of many examples of the use of 20 * log(field strength ratio) to
> >> >express gain in dBi, see Kraus, _Antennas_, Second Edition, p. 443.
> >> >
> >> >In the far field, field strength (volts/meter or amps/meter) is easily
> >> >converted to power density (watts/square meter) by using the impedance
> >> >of the medium (120 * pi ohms for free space). Power densities are
> >> >converted to dB by using 10 * log(power density ratio). Thus a 20 dB
> >> >power density change (a factor of 100) corresponds to a 20 dB field
> >> >strength change (a factor of 10).
> >> >
> >> >You might want to go back and re-evaluate some of your antenna gain
> >> >claims in light of this information.
> >> >
> >> >Roy Lewallen, W7EL
> >> >
> >> >(*) In NEC-2 and -4, the actual calculation is 10 * log((FS ratio)^2) =
> >> >20 * log(FS ratio)
> >
> >>
> >> Who are you talking to?
> >>
> >> NC
> >
> >This was directed to you, although with the knowledge that it's also
> >being read by others.
> >
> >Roy Lewallen, W7EL
> >
> >
>
> This is an outrageous piece of propaganda. It has no accuracy or rlevancy to
> even a remote attempt of extrapolation from my comment to W1RFI's post.
>
> Put simply it is not only wrong, but targetted to be destructive.
>
> What exactly, Mr. Lewallen, is your agenda in this ?
>

> NC

Which part is wrong, my statement about the workings of NEC and EZNEC, of which I'm pretty familiar, or the quotation from Kraus? Or are NEC and Kraus wrong?

Roy Lewallen, W7EL

1781. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:48:34 UTC
From: k3bu@aol.com
Message-ID: <20000909214834.05029.00000204@ng-fe1.aol.com>
Source record: 181050

>
>What exactly, Mr. Lewallen, is your agenda in this ?
>
>NC
>
>

Oh, here we go again, the next posting will include lawyer and signature of
Nathan Cohen, Ph Duh.
Another one for your list Freak?
Get lost with your trolls! GB and SK

1782. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:51:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BAE93A.19B17EFF@eznec.com>
Source record: 181049

Fractenna wrote:
>
> >Those of us who have been on the newsgroup for a while have all learned
> >to be cautious. The only reason I bother posting in response is that
> >people who don't know his track record might be misled. Certainly, I and
> >all veteran readers know that no matter what anyone says, Chip won't
> >ever, ever, change his mind or admit to an error, no matter how obvious
> >or well documented it is. So any posting trying to convince him of
> >anything is a total waste of time and effort. But hopefully the lurkers
> >will learn from both the tone and content of the resulting exchanges.
> >
> >Roy Lewallen, W7EL
> >
> >"Peter O. Brackett" wrote:
> >>
>
> Well Mr. Lewallen, I am prepared to aptly demonstrate that your premise is
> incorrect, and thus your motivationn is, at least ,suspect.
>
> I can, and will, deliberately re-post a where I not only ADMITTED and error,
> but CORRECTED it.
>
> I will, in doing so, require your public apology for said outraegous and
> incoorect characterization.
>
> Do you state, without any hestitation, that your statement is correct and thus
> any evidence to the contrary will produce said apology?
>
> NC

Yes. I hope it's more significant than a typo, though, although I'll
apologize even if you submit evidence of ever having corrected one of
those on the newsgroup.

Roy Lewallen, W7EL

1783. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:52:02 UTC
From: richardharrison@webtv.net
Message-ID: <5321-39BAE942-4@storefull-114.iap.bryant.webtv.net>
Source record: 181056

Chip, N1IR wrote:
"You cannot convert a speed into a distance."

If I have a plot of speed versus time, I`ll bet I can integrate it.

But, we digress. Our argument is whether volts per meter and power per square meter are analogous to volts and power. My pantheon of authorities say that they are analogous and the computations are identical.

Best regards, Richard Harrison, KB5WZI

1784. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 01:56:22 UTC
From: k3bu@aol.com
Message-ID: <20000909215622.05029.00000205@ng-fe1.aol.com>
Source record: 181051

>
>Now I'm really worried, maybe the whole theory of fractal electromagnetics
>and the recent patent are based upon this faulty metrology?
>
>What think?
>
> Peter K1PO

It is based on Freakin Fructal Fric Frac scientwiphic elctroimaginetics deciballing fruity metroinchology. Just ask, Phil, Cohendog, JoeO et all.

See you all at the open house, even if we have to crawl through the windows. We are bringing our own police protectionand parking space. Vinnie is also coming.

Time to sue the whole world, they all conspire aginst Freak. Shame on you people. Hope it helps. Have nice day!

1785. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:00:21 UTC
From: w1rfi@aol.com
Message-ID: <20000909220021.18491.00000520@ng-fm1.aol.com>
Source record: 181052

>From: fractenna@aol.com (Fractenna)

> It becomes a convenient representation to indicate dynamic
>range or change of two quantities of the same observable.

In the case of dynamic range, it is indeed a power or voltage in the same impedance comparison; dynamic range is the difference, expressed in dB, of the weakest signal a receiver can hear and the strongest signal a receiver can accomodate.

>Ed, W1RFI, indeed uses it for power density. This is NOT power.

No, but in comparing power density, one is comparing a power ratio. 10log(P1/P2) = 10 log((P1/x)/(P2/x) = 10log((P1/(x^2))/(P2/(x^2))), etc. (Sure hope I got all the parenthesis right.) To use decibels in a comparison that has power as a factor, one does NOT need to know the exact power level; if the mathematics of that comparison are such that a ratio of power is involved, then 10log(P1/P2) still applies.

I think we are in agreement here.

>If there is an order of magnitude difference in two VOLTAGES,
>this is a 10 dB difference between the two.

Chip, this is just plain wrong. I know of no kind or other way to say it. Other than in this thread, I have never seen a single reference that indicates that dB = 10 log(V1/V2). I have seen hundreds of references indicating that if the two voltages being compared are being measured across the same resistance, then db=20*log(V1/V2).

>the 20 is used when voltages or currents are measured

Well, yes, (if the impedances are equal)so why do you keep saying that 10 is used when voltage gradients are compared?

if dB = 20log(V1/V2) it also equals 20log((V1/m)/(V2/m)); try it with a calculator for different values of M. Any ratio of voltages, however derived, are represented by 20log(V1/V2), in a system where the impedances are equal.

I cede the point about dB and sound pressure, which, btw, is related to a power ratio, but acoustical power, not RF power, but I have never, ever, ever seen dB used to compare plain numbers. It simply is not in the definition. And trying to tell us that because V is divided by m, one uses 10log(ratio) but if V is not divided by m, then 20log(ratio) just doesn't make any sense at all.

Again, in the case of comparing exposure levels, if one goes from 30 V/m to 3 V/m, the change is -20 dB. The power density will be decreased by 20 dB; the applied power must be decreased by 20 dB; the applied voltage to the antenna

will have decreased by 20 dB.

I think, Chip, that your view that the dB function applies to pure numbers has led to some confusion on how and when to apply it as it relates to a voltage gradient. It is a term that can be applied to power, or to amplitude squared, but your assertation that dB = 10log((V1/m)/(V2/m) but that dB = 20log(V1/V2) does not work with my calculator.

>All I have just said rerpises and slightly expands what I have already
>proffereed; glad to be of help.

As am I.

73,
Ed Hare, W1RFI

1786. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:01:07 UTC
From: Ken Harrison <none@needed.net>
Message-ID: <39BAEB63.93E0B63@needed.net>
Source record: 181053

Fractenna wrote:
>
> This is probably one of the most destructive uses of the internet--not to
> express OPINION<--but to make tangible and global efforts to destroy a high
> tech firm. Fortunately, those days are numbered: with this type of manipulation
> being shut down everyday, its only a matter of time before such libelous
> activity explicitly has laws written against it.
>
> I've been here 5 years. I am patient. And right.
>
> 73
> Chip N1IR

I've been very patient myself, putting up with your crap on this
newsgroup and frankly, I've had enough.

You are a pompous ass, undeserving of the privelege to post here any
longer. Go away. Shoo fly.

1787. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:04:05 UTC
From: k3bu@aol.com
Message-ID: <20000909220405.05029.00000208@ng-fe1.aol.com>
Source record: 181054

>
>Just shut up.
>
>Chip N1IR
>
>
>

Ooooo. I hope he is talking to himself.
Hey Murray, have you contacted Boston U? Here is some ammunition.

Hey, what you guys doing to my thread? It was supposed to be about FCC going after the hams with bogus and unfounded regulations. And voila, we have a Freaky stuff going on here with decimballs.

I heard that Kosovo Liberation Army is coming to open (by invitation) Freak house too, they want them super antennas.

Far out man!

1788. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:06:36 UTC
From: k3bu@aol.com
Message-ID: <20000909220636.05029.00000209@ng-fe1.aol.com>
Source record: 181055

>
>Chip:
>
>You are simply WRONG.
>
>Any such use of dB is an obscure and non-standard usage and would never be
>suggested or proffered by any professional practicioner.
>
>You are entitled to go to hell your own way, but man don't be calculating
>the amount of fuel left in my tanks as I am decending to the Mars surface!
>
>Damm scientists!
>
> Peter K1PO

How can anybody beat him in his $1000 joke? He even has his own decimballs! Way to go genius!

1789. Re: Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:25:51 UTC
From: k3bu@aol.com
Message-ID: <20000909222551.05029.00000213@ng-fe1.aol.com>
Source record: 181057

>
>Additionally, if your climb happened to coincide with one of Georgia's famed
>thunderstorms, you could test the veracity of some of Tom's claims about
>lightning protection and grounding. I imagine that a physicist with your
>credentials would "jump" at this opportunity.
>
>What say guys?
>
>
>Wes N7WS
>
>

I will cheap in. Don't forget to get him nice helpmet with sharp spike on the top, so he will be protected from lightning. I bet, when storm sees him, it will take big detour.

BUm

1790. Re: Can I help you? explore your future, believe Me, You never worry, forever happy.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:28:52 UTC
From: k3bu@aol.com
Message-ID: <20000909222852.05029.00000215@ng-fe1.aol.com>
Source record: 181058

>
> China five thousand year culture,be born I ching,the book of change,it be
>turn record china physics,mathematics,relativity and more universe
>algebraical basic knowledge,and provide in line with standard divination
>method.
>
> let your intuition talking,chinese i-ching divination anything.
>
> About your future:
> I provided service: divination Fortune/Stock Exchange/Contract
>Signing/Partnership/Official/Sport Race/ Lawsuit / Weather/ Calamity and
>more.....
>
> http://iching.126.com
>
> Regards,
> lei
>
>
>

Any chance to see 1000 dB old iching divination freaktals there?

BUm

1791. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:31:17 UTC
From: k3bu@aol.com
Message-ID: <20000909223117.05029.00000216@ng-fe1.aol.com>
Source record: 181059

>
>I have a serious question.
>
>How can you tell the difference between Chip and a refrigerator?
>
>Anyone?
>
>

Simple, Stick a digital freaktal thermoter in them and look how many decimballs
they have. If rigerators has more, then it is not plugged in.

1792. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:37:06 UTC
From: 2w8ji@contesting.com
Message-ID: <39baf1b4.61577322@news.akorn.net>
Source record: 181060

On Sat, 09 Sep 2000 18:45:30 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>> What about the distance used to describe the pattern. Could it be too
>> far away for the real world?
>
>I don't think so. The shape of the field is pretty much the same at a
>wavelength or two as it is an infinite distance away. So choose any
>distance within that range, and the shape won't change appreciably.

I'm not sure about that Roy.

If I look at farfield pattern in the model at infinite distance, a
vertical has no groundwave signal over real earth. If I look at the
real-world pattern at 20 miles, the groundwave field strength is
appreciable. At 10 miles, it converges even more towards the the
higher angle radiation.

If I look at it at two wavelengths, there is virtually no additional
attenuation along the ground.

It seems reasonable to me that if the height of the ionosphere
approaches the distance where the earth hasn't attenuated the signal,
there might be more low angle radiation than expected.

I know I am overlooking some factors, but has the pattern actually
been measured at ten miles distant (or other distances) at various
heights above earth to see if the pattern tracks?

It would seem like the pattern would be accurate as you go up in
frequency, and earth losses increase greatly with distance.

1793. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:42:35 UTC
From: w1rfi@aol.com
Message-ID: <20000909224235.18491.00000528@ng-fm1.aol.com>
Source record: 181061

>From: 2w8ji@contesting.com (Tom W8JI)

Bear with me, Tom; I am just musing here with you. Do keep in mind that most of my knowledge of antennas comes from doing a fair piece of EZNEC modeling, both far-field and near field. And, of course, one of the things that is under consideration here is how well the modeling applies to this real-world antenna situation. But it is a fun conversation. :-)

>Don't some of the NEC engine programs
>calculate FS at extreme distances?

Roy probably knows more about this than I, but the pattern is very clearly far field.

>What about the distance used to describe the pattern. Could it be too
>far away for the real world?

I expect not. The far field distance of 2D^2/lambda should be accurate for the gain of the antenna, except at the very lowest angles. And, though I might accept that even on 160M, a long-haul DX signal might be coming in at angles lower than one might think, I do recall seeing a chart so many years ago that indicated that the signals on the lower HF bands from Europe, to I believe W1, were coming in at 20-40 degrees. I would expect that, for a number of reasons, most 160 M signals are in that general range.

The theory about the far-field pattern distance being too far could probably be tested using EZNEC's near-field pattern to get the pattern nearer the antenna, say 1 km away. It should, if my understanding is correct, match the far field pattern pretty well. It would be a laborious run, though, becuase one would have to select that X,Y,Z coordinates and either run a really big matrix then look for the correct ones to give a pattern or do them one at a time.

Besides, your tests indicate that the disparity is heard on signals that are at a wide variety of distances, which presumably would include a wide range of incoming angles. And at the higher angles, that vertical will be working nearly as good as it would over perfect ground, considering the low ohmic losses in your radial system.

I thought some about the additional structures around your antenna. I don't think they are involved. First, the description you gave doesn't appear to be one that would absorb and not reradiate energy. If they were functioning as parasitic elements to that 80 M antenna, the description doesn't sound like it would create a cloud warmer, so if they had an effect, it would be to make the antenna a bit worse in some directions and angles and a bit better for others. Your tests indicate less performance than you had expected for all directions and angles.

keep coming back to loss, somehow; that is really the one explanation that makes sense. But I don't think it is loss in the feedline, at least not ohmic loss. The coax you use calculated to be about 1 dB loss. I can't think of any reason that it should be more lossy than that in a uniform way that doesn't affect the SWR, and a blatant defect WOULD almost certainly affect the SWR. Maybe, for some reason, some of the signal inside the coax is getting converted into a common-mode signal on the outside of the coax, but the baluns should really take care of that and I just can't imagine 4 to 6 dB of "loss" by that mode.

>Haven't measured power up there. You can bet that I won't either!

I guess you don't climb the tower very much. I don't blame you. But there may be a few ground techniques that you can try. Do you have a copy of EZNEC, BTW? If so, once you model the antenna, EZNEC can predict the complex impedance at the antenna over a wide frequency range. You can analyze the impedance measured at your station, after calculating the effect of the feed line, and determine if it varies as expected, or if it varies less than expected. (Knowing the length of the feed lines precisely would help a lot). I have done the first parts of this -- the EZNEC run and the TLA.EXE analysis; I can review some of the math in that Witt QST article to refresh my memory on how to estimate feed line losses from the results. I think that the MFJ-259 also has a feed-line loss function that may help. After typing all this, it does look like a lot of work, though, eh? :-)

Equally interesting are the results you indicate others with similar high antennas have seen. I just can't imagine all these experienced 160 M hams putting up lossy antenna systems.

OTOH, I really am at a loss to explain what is going on. I wonder if it would help to do some accurate FS measurements? I will chat about this off line, if it looks like that will be the only way to resolve this.

BTW, what is the length of feed line to the vertical?

73,
Ed Hare, W1RFI

1794. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:47:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39baf57d.62546242@news.akorn.net>
Source record: 181062

On Sat, 09 Sep 2000 21:46:05 -0400, sideband <sideband@cac.net> wrote:

>On or about Sun, 10 Sep 2000 00:48:10 GMT, 2w8ji@contesting.com (Tom
>W8JI), using the forum rec.radio.amateur.antenna did say:
>:
>:I have a serious question.
>:
>:How can you tell the difference between Chip and a refrigerator?
>:
>:Anyone?
>
>1. It's easy to find out how a refigerator operates.

Good answers SSB, but not the best one!

There is one single answer that is accurate. Take the Fractal test.

How can you tell the difference between a Chip and a refrigerator, in
one line please.

73 Tom

1795. Biggest money sucking antenna ever?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:49:30 UTC
From: k3bu@aol.com
Message-ID: <20000909224930.05029.00000223@ng-fe1.aol.com>
Source record: 181063

Here we go with biggest money sucking antenna project, way to go, maybe they can discover decent program that is worthwile watching.
Is Freak ET? Maybe that's why you people don't understand him.

look at
http://www.sunday-times.co.uk/news/pages/sti/2000/09/10/stifgnnws01001.html

snip, snip

"Scientists hope to detect television and radio transmissions, or signals broadcast by alien civilisations. "We will use it to survey stars up to 1,000 light years away from us," said Jill Tarter, a leading researcher at the Search for Extra-Terrestrial Intelligence (Seti) institute in America. Seti's instruments are only powerful enough to examine several hundred stars. "

lotsa snips

Yuri

1796. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:50:35 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <%FCu5.65$Qe.5632@newshog.newsread.com>
Source record: 181064

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:8pdaav$j00$1@slb6.atl.mindspring.net...
> Never forget that...
>
> The radio spectrum belongs to "we the people".
>
> It is only "by our leave" that we permit regulators and others (ARRL) make
> suggestions.

Ahhh...This is a "Representative Democracy", not a Democracy. <:-))

Roger (K8RI)

>
> At any time "we the people" might just decide (Say by a "proposition" in
an
> upcoming election maybe. Heh, heh, anyone buy this?) to usurp the power
> given by us to the regulators to oversee "our spectrum".
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
> news:hphu5.609$u95.1568944@news.ntplx.net...
> > K1BQT <k1bqt@aol.com> wrote:
> >
> > >Bandplans should be mandated by the FCC based upon proposals for
> rulemaking
> > and
> > > not "suggested" by a minority entity motivated by special interest.
Who
> > in
> > > hell gave Dave Sumner and his band of merry men this power anyway?
Fill
> > me in!
> >
> > Hi, Rick,
> >
> > I think the power to make suggestions is given to Dave by the

> Constitution.
> >
> > There are many people who feel that the only rules that amateurs need
are
> > "here are your band edges; have fun."
> >
> > I am not one of them, but I do not believe that strict rules and
> regulations
> > are always the answer, either.
> >
> > 73,
> > Ed Hare, W1RFI
> >
> >
> >
> >
>
>

1797. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:52:39 UTC
From: k6mhe@arrl.net
Message-ID: <39baf70e.9807778@news.mcn.org>
Source record: 180977

On Sat, 09 Sep 2000 18:51:54 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Fractenna wrote:
>>
>> >Those of us who have been on the newsgroup for a while have all learned
>> >to be cautious. The only reason I bother posting in response is that
>> >people who don't know his track record might be misled. Certainly, I and
>> >all veteran readers know that no matter what anyone says, Chip won't
>> >ever, ever, change his mind or admit to an error, no matter how obvious
>> >or well documented it is. So any posting trying to convince him of
>> >anything is a total waste of time and effort. But hopefully the lurkers
>> >will learn from both the tone and content of the resulting exchanges.
>> >
>> >Roy Lewallen, W7EL
>> >
>> >"Peter O. Brackett" wrote:
>> >>
>>
>> Well Mr. Lewallen, I am prepared to aptly demonstrate that your premise is
>> incorrect, and thus your motivationn is, at least ,suspect.
>>
>> I can, and will, deliberately re-post a where I not only ADMITTED and error,
>> but CORRECTED it.
>>
>> I will, in doing so, require your public apology for said outraegous and
>> incoorect characterization.
>>
>> Do you state, without any hestitation, that your statement is correct and thus
>> any evidence to the contrary will produce said apology?
>>
>> NC
>
>Yes. I hope it's more significant than a typo, though, although I'll
>apologize even if you submit evidence of ever having corrected one of
>those on the newsgroup.
>
>Roy Lewallen, W7EL

Yes Roy,

I believe that many, like myself, have easily arrived at the point
that Chip's postings are, at best, a waste of time to read.

Danny, K6MHE

1798. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:53:31 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <b3tep8.a45.ln@mail.specsol.com>
Source record: 180969

Fractenna <fractenna@aol.com> incorrectly wrote, probably just to get attention:
> I will be brief and to the point--accurate and honest.

> A dB is a means of representing the logarithm of the ratio of two quantities.
> In most EE applications, those quantities are power, or are meant to relate to
> power ratios as extrapolated from the observable--such as voltage.

Nope. In most EE applications dB power is used for RF stuff, db Volts for
other stuff. Look at any OPAMP spec sheet; the open loop gain is normally
given in terms of voltage gain, i.e. db Volts.

> However--

> It has become common practice to adopt the dB scale in cases where POWER is NOT
> being discussed. It becomes a convenient representation to indicate dynamic
> range or change of two quantities of the same observable.[Ed, W1RFI, indeed
> uses it for power density. This is NOT power.]

It has LONG been common practice to use dB for other than power ratios. Once
again, look at an OPAMP spec sheet. You will find a graph of 20*log(Vout/Vin)
against frequency.

> If one wants to COMPARE TWO VOLTAGE DENSITIES as a DIFFERENCE--such as Ed
> discusses-- then there is neither relevance nor accuracy in discussing POWER.

There is no relevance to this statement. Only Chip is hung up on trying
somehow to hang power on a voltage difference.

> If there is an order of magnitude difference in two VOLTAGES, this is a 10 dB
> difference between the two. But it also represents a 20dB difference in POWER
> when extrapolated to such.

Flat wrong. 20*log(10)=20, ergo 20dbV diffence between the two.

> I hope that people understand where the 10 and 20 come from in the log
> formula--the 20 is used when voltages or currents are measured--and a POWER
> ratio is being considered (you have to square in Ohm's law to get powers, thus
> squaring raises the 10 to a 20). Otherwise, to indicate a sense of the dynamic
> range of the observables alone, the 10 is used.

The first sentence is correct but overly wordy to say:

10*log((V1^2/R) / (V2^2/R) = 20*log(V1/V2)

The second sentence is plain nonsense.

> I am deeply troubled that the dB scale has become some sort of memorized hocus
> pocus, as opposed to a simply derived and useful idea..

The only confusion here is by Chip; the rest of us got it years ago.

> All I have just said rerpises and slightly expands what I have already
> proffereed; glad to be of help.

> 73
> Chip N1IR

I would suggest that anyone with an interest in electronics obtain a copy of The Art of Electronics by Horowitz and Hill wherein one can find clear, succinct, non-ego driven explainations of how electronic things work.

Jim Pennino

1799. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:55:13 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <lKCu5.74$Qe.5516@newshog.newsread.com>
Source record: 181065

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Brad Wilson" <w4bpw@arrl.net> wrote in message
news:Rypu5.2836$Ik.15931@news2.atl...
> I don't think there is a website that is the 'end all' of things for
> antennas, but the easiest antenna I have ever built (and that WORKED as it
> said it would) was a copper J-Pole for 2M. It is built from standard
copper
> tubing you get at the hardware store, and I think mine cost about $6 US to
> build. Just search on the net or ARRL website for 2M J Pole and that
should
> get you started, Mine was built using the directions in the ARRL 1996
> Handbook, but all of the ARRL handbooks should have them in there...

I can't remember if it was by some one working for our club, or just
donating the money, but there is usually a pile of those J-Poles made from
1/2 inch copper water pipe at our swap every year.

Cheap, solid, and long lasting.

Roger (K8RI)

>
> Brad
> W4BPW
>
> ---
--
> -------
> The box said 'Use Windows 95 or better', so I installed Linux!
>
> "alex" <A_L_E_X1@yahoo.com> wrote in message
> news:968470716.729360@nomad.vif.com...
> > Hi, All!!!
> > I've readed alot from these postings, but i can't find the answer to my
> > question. How to build a UHF-VHF antenna, maybe you know a web-site with
> all
> > the sizes and parameters of antennas, or maybe you can explain it here?
> >
>
>
>

1800. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:57:22 UTC
From: sideband <sideband@cac.net>
Message-ID: <s3ulrs8abf940arh71d5lrgmuee3jei6po@4ax.com>
Source record: 181066

The bends in a refrigerator's system actually do something?

-SSB

On or about Sun, 10 Sep 2000 02:47:00 GMT, 2w8ji@contesting.com (Tom
W8JI), using the forum rec.radio.amateur.antenna did say:

:On Sat, 09 Sep 2000 21:46:05 -0400, sideband <sideband@cac.net> wrote:
:
:>On or about Sun, 10 Sep 2000 00:48:10 GMT, 2w8ji@contesting.com (Tom
:>W8JI), using the forum rec.radio.amateur.antenna did say:
:>:
:>:I have a serious question.
:>:
:>:How can you tell the difference between Chip and a refrigerator?
:>:
:>:Anyone?
:>
:>1. It's easy to find out how a refigerator operates.
:
:Good answers SSB, but not the best one!
:
:There is one single answer that is accurate. Take the Fractal test.
:
:How can you tell the difference between a Chip and a refrigerator, in
:one line please.
:
:73 Tom

1801. Re: Fractal refrigerator serious question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:58:12 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39BAF8C3.F1CDDB12@attglobal.net>
Source record: 181067

I think you won the chilling question of the Fractal Refrigerator Contest
Wayne

sideband wrote:

> Press record on the camcorder, open the door, put in the camcorder,
> shut the door, wait 2 minutes, open the door, remove the camcorder,
> close the door, hook the camcorder up to the TV, press rewind, press
> stop, press play, watch TV.
>
> ::grin::
>
> Just my two cents.
>
> -SSB
>
> On or about Fri, 08 Sep 2000 23:58:49 GMT, Gilbert Mouget
> <gilbert.mouget@waika9.com>, using the forum rec.radio.amateur.antenna
> did say:
>
> :
> :
> :Salut,
> :
> :I am a bit puzzled.
> :I bought a refrigerator.
> :When I open the door there is a light inside.
> :Is it possible to tell if the lamp is really switched off
> :when the door is closed ?
> :
> :Thanks for the answers and 73

1802. Re: SPI-RO MFG TRAP DIPOLES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 02:59:37 UTC
From: Alan Biocca <Alan.Biocca@usa.net>
Message-ID: <tOCu5.182355$i5.2632263@news1.frmt1.sfba.home.com>
Source record: 181068

One-Trap-pair Multiband Dipoles

Alan Biocca, WB6ZQZ, 9/00

I have been testing two two-trap multiband dipoles, the Spi-Ro, and the W2AU/W2VS. Both antennas use a 40 meter trap in each leg and are approximately 110 feet long:

0----------------trap----------------balun/feedline----------------trap----------------0

Sources - The Spi-Ro is avertised in QST, and the W2AU/W2VS is available from Amateur Electronic Supply.

Background - The parallel resonant traps isolate the central dipole on 40 meters (where is is resonant), act as inductors shortening the (whole) antenna on 80 meters, and act as series capacitors on the higher bands. By judicious selection of L/C ratios and wire lengths this antenna can be fed with a simple coax and achieve 3:1 or lower SWR on 40/20/15/10/6 meters, staying under 5.5:1 on the ends of 80 meters and the nonharmonic bands (SWR will vary somewhat with each installation environment). There are numerous examples of this type of antenna in the ARRL literature. The moderate SWRs are important both from the standpoint of compatibility with the (in some models) limited range of automatic tuners, and to minimize losses in the coaxial feedline that become significant if the SWR is high. This antenna has similar performance to the popular G5RV but is easier to match.

I originally started with a G5RV fed with coax/choke/ladder line and found the SWR varied so significantly that the autotuner in the IC761 could not handle it on some frequencies, and that eventually led me to the W2AU/W2VS antenna. It solved the matching problems and I used it for a number of years until the guy rope failed and the aluminum coil was ground through dragging on the asphalt shingles of the roof. I will use better guy line and insure that the coils are not allowed to drag on the roof in the future...

The Spi-Ro traps are PVC encased with brass screw attachments for the wires. The coils are necessarily small in diameter inside the PVC. I did not section one so I don't know the arrangement. There is a mark to orient the trap, so apparently the internals are not exactly symmetrical. Due to the PVC the traps are heavier than the W2AU/W2VS.

I constructed the Spi-Ro antenna with the recommended wire lengths: --20'8"--trap--31'9"-- balun --... I used #12 THHN wire, and the Spi-Ro 1:1 Current Balun in the center. I erected the antenna on a camping trip in the National Forest approx 30' up in a fairly flat vee with the ends supported 15 or so feet up. I attached 50' of RG8X and used a MFJ antenna bridge to measure the SWR on the varous bands. I'm sorry to say the notes I took are evading my search right now, but it was very squirrely on bands above 40m. This improved

considerably after I changed the feedline, detailed below.

Since these multiband trap dipoles are somewhat reactive on many frequencies the feedline acts as an impedance transformer. The instructions for the Spi-Ro do not mention feedline length, but the instructions I have for the W2AU/W2VS traps recommend some lengths that provide better matching on the bands above 40m. I changed the feedline to an 83 foot length of RG58 and re-tested the Spi-Ro antenna. The effect was fairly dramatic on the higher bands, and the resulting SWR was similar to the W2VS which will be detailed below. Note that the higher loss of the RG58 also helped to lower the SWR. In my final installation I plan to use RG213, which may increase SWR slightly, but will reduce losses.

The W2VS traps are aluminum and plastic, and the coil is exposed (though it is clear-coated). The capacitor is formed from different diameter aluminum pipes that apparently overlap in the center of the coil. The tubes are cast into a solid block of plastic and the coil is wound in grooves on the surface. There is a shorting adjustment apparently to resonate the coil that shorts about three turns on one end.

I constructed the W2VS antenna with the same type #12 THHN wire, using the recommended lengths: ---22'--- trap --- 32' --- balun --- ... The antenna was erected on a different camping trip, and it was stretched between two trees at approx 40' height. Due to the mounting and feedline weight it was slightly lower in the middle than the ends. Using the same 83 foot feedline and meter I measured the SWR across the bands:

MHZ SWR

3.50 5.3
3.61 3
3.77 2
3.755 1.2
3.84 2
3.92 3
4.00 4.6

7.00 2.9
7.11 2
7.18 1.7
7.28 2
7.3 2.1

10.1 4.8
10.2 4.9

14.0 2.5
14.2 2.1
14.35 2.1

18.1 3.9
18.3 4

21.0 2.8
21.45 2.1

24.5 3
24.6 3

28 3.0
29 2.7
30 2.8

50 2.2
52 2.2
54 2.3

These SWRs are all well within the capability of the built-in autotuners in my IC761 and IC746, and both antennas worked quite well as far as I could tell during on-the-air testing. I did not compare them directly on-the-air.

At some point I may do further testing, though for the moment I plan to erect the W2AU/W2VS antenna at the home QTH and use the Spi-Ro for portable use. The PVC traps are a bit better for portable use mechanically, since they get drug in the dirt frequently. One test that was planned but not completed is to check for temperature rise in the traps after a few minutes of continuous carrier.

I don't really know which traps produce the lowest loss. One the one hand we have the larger coils in the W2AU/W2VS traps, with a better length-to-diameter for good Q, but then there is the conductivity of aluminum, the shorted turns at one end, and the aluminum tubing capacitor in the center of the coil to potentially detract from the Q. The Spi-Ro coils need to fit inside the confines of the PVC pipe, which one would expect would reduce the Q as well. At 100 watts the traps would have to consume 25 watts each to make a 3db loss in efficiency, which should be easily noted by trap temperature changes. With the insulative properties of PVC I suspect that a 25 watt loss would lead to coil failure. I never noted coil temperature increases, though I did not perform the specific test. My suspicion is that loss differences between traps are likely not enough to be important from an on-the-air standpoint. Perhaps more important is power handling capability, weatherability, and life. The Spi-Ro PVC is quite heavy, perhaps schedule 40 or heavier, so it should resist sunlight for a long time. The W2AU/W2VS traps are aluminum - down to the screws and washers and I can say they do not seem to significantly corrode or degrade in 5 years at my QTH (Richmond, CA, not near the bay).

In practice these antennas work very much like regular dipoles. The shortening on 80 meters is very helpful when fitting them into my home QTH, while not enough to make a noticeable loss in efficiency (according to my modelling). The convenience of a single antenna that works on all the bands within the range of built-in automatic antenna tuners is significant. There are no grounding issues since the antenna is symmetrical, and this is enforced by using a current balun at the feedpoint. There should be some gain (in some directions) at the higher frequencies, since the whole length of the wire is carrying current.

Alan Biocca
WB6ZQZ

1803. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:04:19 UTC
From: kleinNOSPAM@gilhousen.com
Message-ID: <39bff6f0.108176559@news>
Source record: 180970

On Sat, 9 Sep 2000 19:10:36 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Klein:
>
>Exactly so....
>
>End of discussion.
>
>Chip will not be able to produce a single referece where the Bel or deciBel
>is not defined in terms of power.
>
>He appears to be extremely deficient in his knowledge of electrical
>Engineering practice.
>
> Peter K1PO
>
>--
>Peter O. Brackett
>Morrisville, NC

Hello Peter,

There is nothing fundamental about the decibel. It is an engineering convenience, that's all. Another poster provided a reference from an ancient BSTJ where the decibel is proposed and defined. As they suggest, it is a convenient way to express power relationships. Of course, if you do it wrong, your systems, antennas, etc won't work as you would hope. Just like any other misteak. ;-)

I recall attending a technical conference maybe 5-7 years ago on the newly emerging PCS service. At one point, an attorney got up to speak who representing some companies having existing licences to operate microwave systems in the proposed frequency band. He stated that his clients would INSIST on obtaining 200 dB protection from the new services. Clearly, this man had all too recently been introduced to the decibel. This was the practical end to his speech because all the engineers in the place were literally rolling on the floor and laughing uncontrollably.

Klein, WT6G
p.s. The 10 el 80m beam is now working again. I needed to unwrap the feedline from around the tower that holds up one end of the wire beam.

1804. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:07:14 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39BAFAE2.AC29E2BB@attglobal.net>
Source record: 180971

OK... I think i figured it out. I used my Dad's antenna anaylizer and started triming. The resonate frequency was around 27 mhz, but the bandwith was really narrow, and only 2.5-3.0 :1 Not good, so I began trimming the whip, and frequency rose slightly but bandwidth was narrow. then I moved the antenna slighly positioned behind the bumber rather than next to the body of the suburban. To keep the antenna above the roofline I added a spring and 4 in chaft to the mount (at the bottom), thus raising the antenna and effectively adding some antenna length (about 8 inches) thus raising the two resonators (if that's what they are), or open coils. All of the sudden the bandwidth grew like crazy , so i trimmed the antwenna again and have between 1.7-2.5 :1 from 27.6 mhz to 29.6 mhz...

Thanks to all for the advise and comments, it gave me something to think about!
Wayne
N3TNS

Wayne Grauel wrote:

> OK Folks... here it goes. I have a 96 Suburban that I want to mount an
> antenna for 10 meters (without drilling holes in my vehicle). I
> currently made a mount from steel that comes out from under the rear
> bumper/drivers side (so doors will open). This antenna was a ham fest
> acquisition and the notation said it was very broad banded for 10 & 11
> meters. it's shiny, has two big coils (like springs, not wound coils)
> and is about 5 feet tall or so and aparently isn't worth a hoot!. I
> have no directions. When mounted it sticks up past the roof about 1.5
> maybe 2 feet. I took my TS440SAT out and placed it on the fron seat
> (coax is in the vehicle, not running outside).
> SWR's were through the roof. The vehicle was sitting beside the house
> in the driveway.
>
> I have a hunch this is a glorified CB antenna. The AT would tune it but
> not above 29 MHZ. I'd kinda like to have an antenna that will tune to a
> reasonable SWR so I can use my little IC706 (no tuner) .
>
> Well everyone, did I give you enough info to point me in the right
> direction, do I start cutting wire off the antenna (whip is adjustable),
> or do I shit-can it and find a ham stick.
> It is adjustable to about 4 inches before it bottoms out.
>
> Inclusion.... here's a thought, does anyone think that by removing one
> of the sets of "springs" this would place it in the 10 meter band????
> I'm assuming a 10 meter antenna will be shorter than an 11 meter
> antenna...no?

>
> Back to original post....
>
> I'm just not sure which way to go or what is the culprit.
>
> I'd really like to stay with a bumber mount of some kind and not have
> some huge mast on top of the roof, etc.
>
> TNX
> Wayne
> N3TNS

1805. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:16:27 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8peufb$7uh$1@iac5.navix.net>
Source record: 180972

Ed, my daddy told me years ago, when arguing with a jackass; make sure he isn't doing the same. Chip knows he is wrong and will never admit it. It is a total waste of time to argue with him. He has neither the engineering background nor the logical mind required to accept the mathematical proof you so eloquently offered. A simple case of casting pearls before swine...

--

Fred W4JLE
http://w4jle.com/

"W1RFI" <w1rfi@aol.com> wrote in message news:20000909134150.18398.00000377@ng-fm1.aol.com...
> >From: fractenna@aol.com (Fractenna)
>
> >Then you would, by definition, state that it its not relevant to compare two
> >measurements in units of V/m --with a dB scale. Such units can never, ever,
> >be represented as a 'power'.
>
> That is not correct, Chip. The units of V/distance and A/distance in
> representing fields are related to (power/(distance^2) by virtue of the
> impedance of free space (377 ohms). So an electric field of 1V/m has an
> implicit relationship to power because by defintion, a field is occuring in a
> free space impedance of 377 ohms.
>
> To convert V/m to power density, use (V^2/377)/m^2. Because the impedance is
> identical in comparing 3 V/m and 27V/m as it relates to radiated fields from an
> antenna, it is perfectly valid to use the formula 20*log(V1/V2) to obtain the
> difference between the two units in dB.
>
> The ONLY definitions I have ever seen relating to the bel, the basic unit
> behind the decibel, state that it the log10 of the ratio of two powers. I have
> never seen it applied to anything else in any text book ever. Can you supply
> any reference that indicats that the bel is a ratio of pure numbers? the log10
> function is very much a ratio of pure numbers, although log((X/n)/(Y/n)) is a

> perfectly valid operation for which the n's cancel out. But by defining
the
> bel as a ratio of two powers, then one can use log(P1/P2) for power and
one can
> ONLY use log(V1/V2) if V1 and V2 are both in the same impedance. In the
case
> of radiated fields, they are.
>
> I do not believe the bel could be applied to pure numbers, because if it
were,
> then 10*log ((1/1)/(1/1)) would be = 20*log((1/1)/(1/1)) if in the first
case,
> we were discussing pure numbers and in the second case, we were discussing
> those same numbers representing voltages measured in a circuit of 1 ohm.
>
> With the definition that bel = log(P1/P2) and bel = 2log(E1/E2) then
> normalizing R to 1 ohm, then bel = log(E1^2/E2^2) - 2log(E1/E2).
>
> 73,
> Ed Hare, W1RFI
>
>

1806. Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:21:47 UTC
From: Jim Hahn <jimboL51@home.com>
Message-ID: <39BAFDD6.FD071E41@home.com>
Source record: 180973

I need your guys help! After being out of amateur radio for 32 years, I'm getting back into it with some vintage Heathkit gear. Problem is CC&R's and Wife. I'm putting up one of those Spider antennas off of our rear metal fence which overlooks a canyon and which will serve as the ground. I know that it is not idea, but is really the best that I can do as I cannot run any other kind of antenna which will not be observed by the neighbors and wife. I've really got to keep the whole thing rather stealthy. Problem is that my wife just found this tube that I picked today from Radio Shack which claims to be able to bring your coax through the wall and keep the whole affair waterproof. She had a fit stating that " you are not going to be drilling any hole through our walls". Can you all out there help me out so I can find a simple way to bring my coax into my rig room without drilling holes ie through the window somehow? Life was much simpler at the age of 16 with my Johnson Viking Valiant and SX-101 and 40 meter dipole at my parents house! Thanks! Jim Hahn in San Diego

1807. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:23:46 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8peut2$8cq$1@iac5.navix.net>
Source record: 180974

And he worked them all in 6 hours, but not contiguous.

--

Fred W4JLE
http://w4jle.com/

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39bada7a.55630293@news.akorn.net...
> On 09 Sep 2000 19:29:13 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >Fun!
> >
> >Just worked country 310 on 10M with the 10M fractal quad yagi (see:
> >
> >http://www.fractenna.com/ham/hampage1.html
> >
> >8Q7XX, first call!
> >
> >73,
> >Chip N1IR
>
>
> More cleverly worded bullcrap.
>
> Read carefully folks. What he is saying is over the past many years on
> all bands, he has managed to work 310 countries (big deal) using other
> antennas.
>
> Now he worked one new DX station with his pathetic FQY, and want's us
> to believe he did it with one call.
>
> 73 Tom

1808. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:45:22 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <mtDu5.182420$i5.2632773@news1.frmt1.sfba.home.com>
Source record: 180976

JIm-
Tough decision, man.
Wife? Radio? Wife? Radio?
I'd go with the radio. You can turn it on and off at will.
Good luck!
Mike Camp ki7fq

"Jim Hahn" <jimboL51@home.com> wrote in message
news:39BAFDD6.FD071E41@home.com...
> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego
>
>
>

1809. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:49:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BB04C9.E99CDA41@eznec.com>
Source record: 180975

Fractenna wrote:

> . . .
> If there is an order of magnitude difference in two VOLTAGES, this is a 10 dB
> difference between the two. But it also represents a 20dB difference in POWER
> when extrapolated to such.
>. . .

An order of magnitude difference in two voltages (across the same resistance) is 20 dB. This will result in a difference in the power dissipated by the resistance of 20 dB.

Roy Lewallen, W7EL

1810. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:54:03 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39BB0583.93EE9891@oltraining.com>
Source record: 180978

Hey guys. It's been several years since I read much here on the newsgroups. What is the story on the hidden antenna? I am curious to know. Was there an RFI case as the result of a hidden antenna?

Terry - W6LMJ

'Doc wrote:

> Fractenna wrote:
> >
> > ------clipped-----
> >
> > So, you feel that because you messed up, that its ok to strike out at others
> > you perceive as targets...that about the gist of it 'Doc'?
> >
> > 73
> > Chip N1IR
>
> Ooo Chip! You know what happens when you make assumptions
> you shouldn't, especially with no 'fact' to back it up. And
> would you kindly point out to me where I "messed up"? There
> is a saying in Arkansas... Suuuuuu-eeeeeeee! Sue! Sue Sue!
> (Sound familiar?)
> 'Doc

--

Terrence R. Redding, Ph.D. | over 90 Computer Courses
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1811. Is this useful?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 03:59:51 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <XGDu5.182439$i5.2633100@news1.frmt1.sfba.home.com>
Source record: 180979

Hi-
while browsing E-Bay (I am bored...) I found this attenuator, Item
#432703742:

AIL CUTLER HAMMER PRECISION ATTENUATOR TYPE32

TYPE 32
3262 SER# 721
0-999.9 DB
50 OHM INPUT & OUTPUT

I am truly ignorant of many things, but 999.0 dB attenuation seems like a
lot. Of what use might this box be? Door stop not withstanding...

Mike Camp KI7FQ

1812. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:04:45 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <dr1mrs0i9rg0vjlsvto6avpst7ctdfg9bl@4ax.com>
Source record: 180980

On Sun, 10 Sep 2000 03:21:47 GMT, Jim Hahn <jimboL51@home.com> wrote:

>She had a fit
>stating that " you are not going to be drilling any hole through our
>walls".

I think you need to have a short but pointed talk with your wife:

1. Yes, honey, I damn well am going to drill a hole through the wall.

2. If you don't like it, don't look at it.

3. Amateur radio is my hobby; it's what I do for fun and relaxation.
Bug me again and you're fired.

73, Bill W7TI

1813. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:08:12 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <39BB092C.7918027@nettally.com>
Source record: 180993

Drill a hole through the FLOOR and rout the cable out of a foundation vent.

Jim Hahn wrote:

> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego

--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

Dopeler effect: The tendency of stupid ideas to seem smarter when they come

at you rapidly.

1814. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:18:12 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8pf3h1$j01$1@slb6.atl.mindspring.net>
Source record: 180987

K1BQT wrote in message <20000909104056.08060.00000270@ng-ff1.aol.com>...
>
>Besides, it's illegal in most states to shoot a giraffe.
>
>Rick K1BQT

You will not hurt the giraffe. All the animals are in a meeting.

Dean Craft -- W4IHK
w4ihk@mindspring.com

1815. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:20:16 UTC
From: sideband <sideband@cac.net>
Message-ID: <1q2mrsonu2qg065bjvjmfdr8s65udlvq6u@4ax.com>
Source record: 180981

Well, I wouldn't be THAT blunt about it...

I think I'd point out that, if you're all stressed out, and can't relax doing your hobby, that you might have a heart attack at a young age, and then you woulnd't be around to finish up that honey-do list that keeps growing, or help remodel the kitchen.

Also point out that, without a hobby of your own, you might just have to join her needlepoint group, or her bridge club, or whatever other hobby group she enjoys. ::grin::

Just my two cents.

-SSB

On or about Sat, 09 Sep 2000 21:04:45 -0700, Bill Turner <w7ti@jps.net>, using the forum rec.radio.amateur.antenna did say:

:On Sun, 10 Sep 2000 03:21:47 GMT, Jim Hahn <jimboL51@home.com> wrote:
:
:>She had a fit
:>stating that " you are not going to be drilling any hole through our
:>walls".
:____
:
:I think you need to have a short but pointed talk with your wife:
:
:1. Yes, honey, I damn well am going to drill a hole through the wall.
:
:2. If you don't like it, don't look at it.
:
:3. Amateur radio is my hobby; it's what I do for fun and relaxation.
:Bug me again and you're fired.
:
:73, Bill W7TI

1816. Re: Is this useful?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:23:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BB0CCE.7CFD7623@eznec.com>
Source record: 180982

Wow. 280 dB is the ratio of the light output from a two-cell flashlight
to the light output from the Sun. 999 dB is a LOT of attenuation.

In practice, it's impossible to keep anywhere near that fraction of a
signal from getting around the attenuator one way or another. I don't
have a good background in metrology, but believe that somewhere around
80 - 100 dB is a practical limit for attenuators, for that reason.
Someone more intimately familiar with merology might comment further.

Roy Lewallen, W7EL

Mike Camp wrote:
>
> Hi-
> while browsing E-Bay (I am bored...) I found this attenuator, Item
> #432703742:
>
> AIL CUTLER HAMMER PRECISION ATTENUATOR TYPE32
>
> TYPE 32
> 3262 SER# 721
> 0-999.9 DB
> 50 OHM INPUT & OUTPUT
>
> I am truly ignorant of many things, but 999.0 dB attenuation seems like a
> lot. Of what use might this box be? Door stop not withstanding...
>
> Mike Camp KI7FQ

1817. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:29:24 UTC
From: Jim Hahn <jimboL51@home.com>
Message-ID: <39BB0DAF.8DAFFCD3@home.com>
Source record: 180983

There has to be a way to bring the damn line through the window somehow; isn't there? Jim..... I just remember it not being so hard when my buddy and I were 16; we even put a Mosely 20 meter beam which we bought from Henry Radio in L.A. (1965) up on a homemade tower - until the tower crashed into the house next door; luckily the thing did not go through the roof of the neighbors house; then there was the time that we built a little shocker box out of Popular Electronics but being the intelligent kids that we were in 1966 we upped the voltage from 1.5 Volts to a 90 Volt dry cell somehow. The local Sav-On ice cream manager kind of jipped us on the size of one of the ice cream cones during the summer of 66 - we then proceeded to get behind him barely touching his elbow with said cone flying up towards the ceiling of the place with us barreling out of the store. It was so much easier then without mortgages, payrolls,..... Jim

1818. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:30:23 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39BB0E5F.91729B5@bigfoot.com>
Source record: 180984

Jim Hahn wrote:
> There has to be a way to bring the damn line through the window somehow;
> isn't there?

Lots of hams install a 1x2 across the bottom of the window and
drill holes for the feedline. I prefer plexiglas myself.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1819. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:40:06 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <39BB104C.4C6870B6@home.com>
Source record: 180985

Bill Turner wrote:
>
> On Sun, 10 Sep 2000 03:21:47 GMT, Jim Hahn <jimboL51@home.com> wrote:
>
> >She had a fit
> >stating that " you are not going to be drilling any hole through our
> >walls".
> ----------
>
> I think you need to have a short but pointed talk with your wife:
>
> 1. Yes, honey, I damn well am going to drill a hole through the wall.

There's that CCR thing, tough; tell her you want to move.

> 2. If you don't like it, don't look at it.

Offer to let her paint daisies on it or knit a nice cozy for it.

> 3. Amateur radio is my hobby; it's what I do for fun and relaxation.
> Bug me again and you're fired.

Never, _ever_ threaten to fire your wife. Tell her you would, but
she's not getting off that easy. Tell her she's on probation. Works on
mine, anyway...

Mark L. Fergerson

1820. Re: Looking for RF Concepts 2-417 Schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:43:57 UTC
From: dinod@deltanet.com
Message-ID: <hkEu5.139168$6y5.92392581@news2.rdc2.tx.home.com>
Source record: 180986
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Go to...

http://www.alpha-power-inc.com/rfconcepts/index.html

Now as you may know. Alpha Power is going out of business. They bought
the RF Concepts line from Kantronics (which they are also discontinuing).
They should be able to provide you with a manual.

DIno...K6RIX

>Hello All,
>
>I have an RF Concepts 2-417 2 meter amp that lost the pre-amp function.
>Would anybody happen to have a schematic and/or manual that they could copy
>or scan ? Will be glad to pay for the time and trouble.
>
>Thanks and 73,
>
>Dan - W6DKN
>
>
>

1821. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:51:18 UTC
From: Robert Mansfield <bmansfieREMOVETHIS@interaccess.com>
Message-ID: <srm4kst7ct6154@corp.supernews.com>
Source record: 180988

A trick that I have seen was to replace the glass in a window with a piece
of Plexiglas that had number of bulkhead connectors mounted in it.
Keep the glass and put it back when you want to undo things.

--
Bob Mansfield "Facts do not cease to exist
Broadview Media because they are ignored"
WA8USR Aldous Huxley
s/v Shadow Dancer This is to fix some spamers wagon uce@ftc.gov
enforcement@sec.gov

"Jim Hahn" <jimboL51@home.com> wrote in message
news:39BAFDD6.FD071E41@home.com...
> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego
>
>
>

1822. DIPOLE question, need help !!! thanx

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 04:59:28 UTC
From: pete4www@juno.com
Message-ID: <8pf4fbdqr1@nnrp1.deja.com>
Source record: 180989

Hi, I have an ICOM IC-746 and I just couldn't decide whether to use a vertical HF antenna or use an all band HF dipole, so I have decided to do both. I will use the GAP Titan DX, and maybe the Van Gorden All Bander that is sold for $29.95 I just have a few questions though. I am a new ham, so I don't know a heck of alot about dipoles, but is this All Bander antenna center fed, or is it fed at one end of it? Also, does the dipole have to run in a straight line because if I put this thing in my backyard, I would have to make two 90 degree bends to make it fit. Also, do I have to ground this antenna like I would the Titan DX? If you could please help answer these questions I would appreciate it. Thanks.

Pete Ferdig
Las Vegas, NV
(just passed tech exam, still waiting for call sign)

(....still waiting for call sign....)

(....waiting.....)

(...waiting.....)

Sent via Deja.com http://www.deja.com/
Before you buy.

1823. Re: Fractal refrigerator serious questionAAAAIIIIEEEEE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 05:17:46 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39BB197A.F49238F1@hiwaay.net>
Source record: 180990

Someone must have closed the fridge door on one of the animals- we have
this horses patoot left over.

Bill-W4BSG

Dean Craft wrote:
>
> K1BQT wrote in message <20000909104056.08060.00000270@ng-ff1.aol.com>...
> >
> >Besides, it's illegal in most states to shoot a giraffe.
> >
> >Rick K1BQT
>
> You will not hurt the giraffe. All the animals are in a meeting.
>
> Dean Craft -- W4IHK
> w4ihk@mindspring.com

1824. Re: Is this useful?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 05:22:02 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <qp5fp8.ob6.ln@mail.specsol.com>
Source record: 180992

Roy Lewallen <w7el@eznec.com> wrote:
> Wow. 280 dB is the ratio of the light output from a two-cell flashlight
> to the light output from the Sun. 999 dB is a LOT of attenuation.

> In practice, it's impossible to keep anywhere near that fraction of a
> signal from getting around the attenuator one way or another. I don't
> have a good background in metrology, but believe that somewhere around
> 80 - 100 dB is a practical limit for attenuators, for that reason.
> Someone more intimately familiar with merology might comment further.

> Roy Lewallen, W7EL

Yep, once you get to the 80 db or so range, the efforts required to keep signals from bypassing the attenuator become increasingly heroic; frequency does make a bit of difference.

I once had a minor involement with some people trying to construct an RF free environment; they had a underground shielded room inside a shielded room. As I recall, they got a bit over 100 dB from the outside world.

I would wager the attenuator in question actually goes to 99.9 dB and the 999 was a typo.

Jim Pennino

1825. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 05:24:46 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <yWEu5.182507$i5.2637055@news1.frmt1.sfba.home.com>
Source record: 180991

Jim-
My wife didn't think my response that funny, either. She suggests that you try to get HER interested in radio. Have her (your wife) email my wife, Robin KE6MRH at rjfraatz@home.com and see what happens.

73 Mike Camp KI7FQ

PS I have three holes in the walls for cables, and a big hole in the inside wall at floor level to bring 'em all to the rig. Makes a nice breeze on hot days!

"Jim Hahn" <jimboL51@home.com> wrote in message
news:39BAFDD6.FD071E41@home.com...
> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego
>
>
>

1826. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 05:58:42 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39bb1c96.6612160@news.azstarnet.com>
Source record: 180994

On Sun, 10 Sep 2000 03:21:47 GMT, Jim Hahn <jimboL51@home.com> wrote:

>snip

> Problem is that my wife just found this tube that I
>picked today from Radio Shack which claims to be able to bring your coax
>through the wall and keep the whole affair waterproof. She had a fit
>stating that " you are not going to be drilling any hole through our
>walls".

Jim,

I was just reading your query, and some of the other answers to it, to my wife.

She says drill the damn hole. Explain to your wife that the house has four walls. I believe that California is a community property state, so you own the place 50-50. She owns two walls and you own two walls. You're going to drill through _your_ wall. She can drill through her's or not as she sees fit.

Personally, I have a piece of 2" PVC through my wall and it's getting full. When I need to bring the 7/8 Heliax from the new EME array in, I'm going to put in another one beside it.

The downside to this is that it's hard to keep the scorpions from squeezing by the cables. The upside is that when you have scorpions in the house, you don't have a cricket or cockroach problem. Life is just full of tradeoffs.

Remember, it is easier to get forgiveness than permission. Drill the hole and then announce that you're taking her out to dinner. The dining room at the Coronado Hotel would be nice. Order the chateaubriand for two and a good bottle of champagne (Moet & Chandon R&#65533;serve Imp&#65533;rial would be a nice complement).

This will be expensive, but---and you can trust me on this---it will be a whole lot cheaper than a divorce.

73,

Wes N7WS

>
>

1827. Re: Is this useful?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:07:01 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39BB2505.336EF61E@wb6hqk.ampr.org>
Source record: 180995

Roy Lewallen wrote:
>
> Wow. 280 dB is the ratio of the light output from a two-cell flashlight
> to the light output from the Sun. 999 dB is a LOT of attenuation.

I'll say....

> In practice, it's impossible to keep anywhere near that fraction of a
> signal from getting around the attenuator one way or another. I don't
> have a good background in metrology, but believe that somewhere around
> 80 - 100 dB is a practical limit for attenuators, for that reason.

I've got a fancy step attenuator with a range of 0 to 120 dB in one dB steps. At frequencies below about 50 MHz and using top quality cable, connectors, signal sources and measurement technique, it works reliably all the way to 120 dB. Above 500 MHz, I have never been able to achieve enough isolation external to the attenuator to verify operation with much more than 80 dB or so.

bart
wb6hqk

1828. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:23:10 UTC
From: sideband <sideband@cac.net>
Message-ID: <4u9mrs8i2n77mdcl536dpsfee5o0up6k99@4ax.com>
Source record: 180996

On or about Sun, 10 Sep 2000 05:58:42 GMT, n7ws_nospam@arrl.net (Wes
Stewart), using the forum rec.radio.amateur.antenna did say:
:
:The downside to this is that it's hard to keep the scorpions from squeezing by
:the cables. The upside is that when you have scorpions in the house, you don't
:have a cricket or cockroach problem. Life is just full of tradeoffs.

That spray foam insulation might help you keep the scorpions out...
just spray a thin "barrier" over the end of the pipe on each end, and
around the cables. When you need to add something, poke the insulation
out, pass the new cable, and reinsulate. It'll keep the scorps out,
the Air Conditioning in, and save ya a little bit of hassle and money.

:Remember, it is easier to get forgiveness than permission. Drill the hole and
:then announce that you're taking her out to dinner. The dining room at the
:Coronado Hotel would be nice. Order the chateaubriand for two and a good bottle
:of champagne (Moet & Chandon Rï¿½serve Impï¿½rial would be a nice complement).
:
:This will be expensive, but---and you can trust me on this---it will be a whole
:lot cheaper than a divorce.

Sounds like a $500 night... cheaper than half your net worth, for
sure.

:
:73,
:
:Wes N7WS

73's

-SSB

1829. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:33:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <HWFu5.270$Qe.8782@newshog.newsread.com>
Source record: 180997

Nah.
It started with a discussion about the new (well not quite so new) exposure limits going into effect for hams.

I ran the following through the calculator, but make no claims for accuracy. I have been known to transpose. <:-))

It's not much of a limitation at all for low bands and wire antennas...Just a few feet.

A bit more for a tribander...Figure on 10 meters in that case with 1500 PEP with out processing is 20% and you transmit 50 % of the time (say 5 minute transmissions back and fourth) would be 1500 X 0.2 X 0.5 = 150 Watts average power...and a gain of 10 dbi the controlled area minimum distance is 17.88 feet and the uncontrolled area is 39.93 feet. Meaning if your tribander is at 46 feet and you operate SSB then your neighbor could stand under it at the base of the tower.

But if you operate CW which is figured at a 40% duty cycle...Using the same figures gives an average of 300 watts and the distances become 25 and 56 feet and these figures didn't even take into account the feed line loss.

Now if you operate a quadature array on 2-meters with 20 dbi gain and run the legal limit the distances start to become significant.

Say you run FM which is considered 100%, but you again run a 50% duty cycle in the 30 minutes and you run 1000 watts output, so we end up with an average power of 500 watts. That one creates some significant distances of almost 105 feet from the center of the antenna for the controlled area and just over 234 feet for the uncontrolled area. Course most of us do not run a fraction of this and a DXer running the legal limit on SSB comes out with a little over 57 feet for the controlled area and a bit over 128 feet for the uncontrolled area. CW results in about 81 and 181 feet when running the legal limit.

Good incentive for a taller tower.

Remember that these calculations produce a "worst case" and do not take into account the peaks and nulls in the pattern.

I didn't plug in anything for 220 and up, but the distances go up even more.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Terrence R. Redding, Ph.D." <terry@oltraining.com> wrote in message news:39BB0583.93EE9891@oltraining.com...

> Hey guys. It's been several years since I read much here on the
newsgroups.
> What is the story on the hidden antenna? I am curious to know. Was there
an RFI
> case as the result of a hidden antenna?
>
> Terry - W6LMJ
>
> 'Doc wrote:
>
> > Fractenna wrote:
> > >
> > > ------clipped-----
> > >
> > > So, you feel that because you messed up, that its ok to strike out at
others
> > > you perceive as targets...that about the gist of it 'Doc'?
> > >
> > > 73
> > > Chip N1IR
> >
> > Ooo Chip! You know what happens when you make assumptions
> > you shouldn't, especially with no 'fact' to back it up. And
> > would you kindly point out to me where I "messed up"? There
> > is a saying in Arkansas... Suuuuuu-eeeeeeee! Sue! Sue Sue!
> > (Sound familiar?)
> > 'Doc
>
> --
> -----------
> Terrence R. Redding, Ph.D. | over 90 Computer Courses
> President/CEO | GED Courses
> OnLine Training, Inc. | Insurance Agent Licensing
> | Internet Services
> http://www.oltraining.com | Web Broadcasting
> | Web Site Design
> (561) 357-0841 voice | Training Development
> (561) 357-0842 FAX | Keynote Speaker
> | SDL and Educational Research
>
>

1830. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:42:09 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <53Gu5.271$Qe.8826@newshog.newsread.com>
Source record: 180998

Best method...Move and get a different wife.
Might not even be the most expensive, but then again it could!
My wife always tells me that I'd find it difficult to fly half an airplane.
Says she'd take half the airplane rather than the money.

So, trying for a less stressful approach...There is the old flagpole
approach, or attic antenna. If stuck with the wire over the fence idea, I'd
bring it in underground, sneak it up under the siding (if you don't have
brick) and through the top of the plate over the foundation, or basement
wall.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Jim Hahn" <jimboL51@home.com> wrote in message
news:39BAFDD6.FD071E41@home.com...
> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego
>
>
>

1831. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:48:16 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Q8Gu5.272$Qe.8906@newshog.newsread.com>
Source record: 180999

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Wes Stewart" <n7ws_nospam@arrl.net> wrote in message
news:39bb1c96.6612160@news.azstarnet.com...
> On Sun, 10 Sep 2000 03:21:47 GMT, Jim Hahn <jimboL51@home.com> wrote:
>
> >snip

> Personally, I have a piece of 2" PVC through my wall and it's getting
full.
> When I need to bring the 7/8 Heliax from the new EME array in, I'm going
to put
> in another one beside it.
>
> The downside to this is that it's hard to keep the scorpions from
squeezing by
> the cables.

Get a can of the expandable foam insulation and fill about a foot of the
pipe.
Move the cables around a bit to get them fully bonded to the foam. Most
critters don't like to dig in that stuff, but...don't put it out in the
sunlight as the UV causes it to break down and turn an dirty brown
color...Maybe paint any that shows outside.

Roger (K8RI)

> The upside is that when you have scorpions in the house, you don't
> have a cricket or cockroach problem. Life is just full of tradeoffs.
>
> Remember, it is easier to get forgiveness than permission. Drill the hole
and
> then announce that you're taking her out to dinner. The dining room at
the
> Coronado Hotel would be nice. Order the chateaubriand for two and a good
bottle
> of champagne (Moet & Chandon R�serve Imp�rial would be a nice complement).
>
> This will be expensive, but---and you can trust me on this---it will be a
whole
> lot cheaper than a divorce.
>
> 73,

>
> Wes N7WS
>
> >
> >
>

1832. 3 legged dipole (tripole?) idea

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 06:49:10 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <39BB2EE6.C70C9F51@ix.netcom.com>
Source record: 181000

Could this work? Imagine a 3 legged dipole (tripole?) in a
horizontal plane, with 1/4 wavelength elements comming from
a central feedpoint, spaced 120 degrees apart. One leg
would be fed from the transmitter coax, then there is more
coax (1/3 wavelength) and that feeds the 2nd element, and then
another piece of coax 1/3 wavelength to feed the last element.
So you'd have 3 phases of transmitter power. This should
create an omnidirectional horizontal wave. And circular polarization
up and down.

You could use 3 wire "twin" lead instead of coax to feed the elements,
each wire being 0 degree, 120 degree and 240 degree phase shift.
Of course this will be a monoband antenna.

This the stupidest idea ever thought about on antennas, or what? :-)

1833. Re: 3 legged dipole (tripole?) idea

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 07:29:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BB3871.6C07C3E3@eznec.com>
Source record: 181001

Let's call the wires A, B, and C. The center conductor of the coax goes to wire A. Where does the shield connect? The coax that goes from wire A to B -- presumably the center conductor of one end goes to the end of wire A and the center conductor of the other end to wire B. Where does the shield connect on each end?

Crossed dipoles fed at 90 degrees have been used for ages to get this kind of pattern. It's commonly called a turnstile. An advantage of that configuration is that there's no coupling between the dipoles (in theory at least). So if a coax "delay line" is used between them, it sees as a load the impedance of an isolated dipole. With the proper characteristic impedance, then, the delay in the cable equals its electrical length. This wouldn't be the case if the elements weren't at right angles.

Roy Lewallen, W7EL

Robert Casey wrote:
>
> Could this work? Imagine a 3 legged dipole (tripole?) in a
> horizontal plane, with 1/4 wavelength elements comming from
> a central feedpoint, spaced 120 degrees apart. One leg
> would be fed from the transmitter coax, then there is more
> coax (1/3 wavelength) and that feeds the 2nd element, and then
> another piece of coax 1/3 wavelength to feed the last element.
> So you'd have 3 phases of transmitter power. This should
> create an omnidirectional horizontal wave. And circular polarization
> up and down.
>
> You could use 3 wire "twin" lead instead of coax to feed the elements,
> each wire being 0 degree, 120 degree and 240 degree phase shift.
> Of course this will be a monoband antenna.
>
> This the stupidest idea ever thought about on antennas, or what? :-)

1834. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 09:30:15 UTC
From: w1rfi@aol.com
Message-ID: <20000910053015.22091.00000095@ng-cf1.aol.com>
Source record: 181002

>From: "Roger Halstead" rdhalste@tm.net

>I ran the following through the calculator, but make no claims for accuracy.
>I have been known to transpose. <:-))

As have I. There was that major 19.24 vs 19.42 dB gaff I made a few days ago.
:-)

I did want to add to your calculations by mentioning that RF calculator
distances make some simplifying, generally conservative, assumptions. It
assumes the antenna is a point source and that the exposure is in the main beam
of the antenna. Even in the radiating near field, such a beam is often slightly
upward, with the actual exposure in areas below the antenna being less,
sometimes much less, than the calculator indicates.

> Good incentive for a taller tower.

A point easily made with the FCC's material in OET Bulletin 65, Supplement B.
:-)

> Now if you operate a quadature array on
> 2-meters with 20 dbi gain and run
> the legal limit the distances start to > become significant.

> I didn't plug in anything for 220 and up,
> but the distances go up even more.

Actually, the limits for exposure are the same from 30 to 300 MHz. Above 300
MHz, the limits start to rise again.

73,
Ed Hare, W1RFI

1835. Re: Is this useful?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 09:31:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39BB550B.28DEBF7B@oio.net>
Source record: 181003

Mike Camp wrote:
>
> Hi-
> while browsing E-Bay (I am bored...) I found this attenuator, Item
> #432703742:
>
> AIL CUTLER HAMMER PRECISION ATTENUATOR TYPE32
>
> TYPE 32
> 3262 SER# 721
> 0-999.9 DB
> 50 OHM INPUT & OUTPUT
>
> I am truly ignorant of many things, but 999.0 dB attenuation seems like a
> lot. Of what use might this box be? Door stop not withstanding...
>
> Mike Camp KI7FQ

Open circuit??
'Doc

1836. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 09:35:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39BB55FD.8A9BA323@oio.net>
Source record: 181004

Jim,
Try a board cut to fit in a slightly opened windows. Use a
bulkhead connector going through the board for the coax. Be
sure to color coordinate the board. Mybe a nice set of drapes
to match the new wall paper, and carpet??
'Doc

1837. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 09:43:45 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39BB57D1.748D9723@oio.net>
Source record: 181005

Ralph,
There are three types of "db's" used in antenna work;
1. dbi, pertaining to an isotropic antenna comparison.
2. dbd, pertaining to a dipole comparison.
3. dbbc, pertaining to a beer can comparison.

There is one more type of "bd's", use primarily in
making CB antennas. It is;
4. dbtslc, pertaining to a 'turd size lumb of coal' comparison.
'Doc

1838. Re: DIPOLE question, need help !!! thanx

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 10:18:59 UTC
From: w1rfi@aol.com
Message-ID: <20000910061859.22091.00000100@ng-cf1.aol.com>
Source record: 181006

>From: pete4www@juno.com

>I am a new ham, so I don't know a heck of alot about dipoles...

Took me a while to learn more about them than the formula on my General test.
:-)

If an antenna is advertised as a "dipole," it would generally be fed in the center, though I have seen a few advertised "off-center-fed" dipoles. Dipoles come in a number of flavors, to the simple ones cut to resonance and fed with coax to simple ones not cut to resonance and fed with ladder line and tuned with a tuner (one antenna can be used on all HF bands easily that way) to various multiband designs such as trap, G5RV, fan, etc.

The ARRL has a nice page on dipole antennas at

http://www.arrl.org/tis/info/dipole-h.html.

Mike Gruber, now W1MG, wrote a nice article in QST that discusses various multiband dipoles. See http://www.arrl.org/tis/info/pdf/9611073.pdf.

Dipole antennas are generally intended to be used "flat," either horizontally or vertically. However, if you can only fit them by bending them around, you can usually get away with it. The effect of bending the radiating element would generally be to change the impedance and resonant frequency a bit. The resonance can usually be corrected by adding or removing a few inches or feet of wire. If the best SWR is higher than the frequency you want to operate, add wire; if it is lower than you want to operate, remove wire. Alternatively, you can use an antenna tuner to match the antenna system to your transmitter.

If the SWR on a coax-fed antenna is <1.5:1, you won't have to do anything to have an excellent match to your transmitter. If the SWR is >1.5:1, some transmitter's SWR protection circuitry might kick in, reducing transmit ppwer. If there is no SWR protection in your transmitter you can consider an SWR of 2:1 to be quite acceptable. If the SWR is < about 5:1, the coax will be reasonably low loss, but you will have to use an antenna tuner. You can often use a tuner for higher SWRs, but at higher SWRs, the losses on the coaxial feed line will start to be significant.

On an open-wire fed dipole, the SWR on the open-wire feed line can actually be very high, but the line loss is so low that the additional loss caused by SWR is usually not that important.

If you enjoy antennas, see the ARRL TIS web page at:

http://www.arrl.org/tis/#tech

and download the various reprinted QST and other articles. Last count, there are about 100 info pages and 500 articles there.

73,
Ed Hare, W1RFI

1839. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 10:34:52 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <WlJu5.3744$Ek.12395@newsfeed.slurp.net>
Source record: 181007

Hi, Jim:

If the wall is not metal, try two loops on opposite sides of the wall, ot two pieces of open-wire line. They will sorta-link-couple to each other -- you will need to experiment with size, etc. Rule-of-thumb: make the line spacing or loop diameter several times the wall thickness. Got this idea from the past, where someone got tired of using his continuous rotator as a line-stretcher/breaker <BG>.

I use a tuner and open wire line links to couple successfully 160-10M thru a sacrosanct brick wall to a 250-ft dipole. Glass, of course, is the simplest challenge.

HTH -- 73, Dave, K3BHJ

1840. 20 M monoband vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 10:41:24 UTC
From: w2wx@aol.com
Message-ID: <20000910064124.02797.00000539@ng-fk1.aol.com>
Source record: 181008

Does anyone know if there are 20 meter monoband verticals available commercially? I know that Gladiator, now out of business, used to make some monoband verticals. Please email me. Thanks very much.

Steve, W2WX

w2wx@aol.com

1841. Re: hewmer, hummer, huemar

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 10:57:34 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <cHJu5.3745$Ek.12252@newsfeed.slurp.net>
Source record: 181009

Peter:

Yer welcome. UAYSF. Add to and re-post, if you like.

73, Dave

1842. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:37:53 UTC
From: fractenna@aol.com
Message-ID: <20000910073753.08289.00000606@ng-mf1.aol.com>
Source record: 181010

>Chip, this is just plain wrong.

No it is not. Why do you require repitition on this?

If the dB scale is being used--as it usually is--to denote POWER RATIOS then one must do what one needs to get power UNITS, such as use Ohm's Law and square the values and incorprate resistance--hence the 20.

If the dB scale is being used as a logarithmic indicator of dynamic range of a quantity then one uses the dB SCALE to translate teh ratio into a number.

Accept the fact that there are many cases where dB is NOT used to indicate POWER.

Now Ed: your V/M measurements--so posed can NEVER give POWER. EVER. Unless you integrate over an area and DENOTE THE TWO AREAS USED IN THE COMPARISON then there is no way to get POWER. EVER.

I am extremely disappointed that some hands refuse to understand and use dimensional analysis in this context. dB is NOT a handy memorized set and forget plaything, but a wonderful scale with real physical basis and use.

NC

1843. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:42:19 UTC
From: fractenna@aol.com
Message-ID: <20000910074219.08289.00000607@ng-mf1.aol.com>
Source record: 181011

>An order of magnitude difference in two voltages (across the same
>resistance) is 20 dB. This will result in a difference in the power
>dissipated by the resistance of 20 dB.
>
>Roy Lewallen, W7EL
>

An order of magnitude voltage difference is a 10 dB voltage difference. It corresponds to a 20 dB difference in POWER. NOT voltage.

Either you lock into the definition of dB with respect to POWER ONLY or you don't.

In the first case, the comparison of 2 values on V/m can NEVER give power and thus you cannot give a dB value. In the second, for an order of magnitude difference, it is a 10 dB difference in V/m, and a 20 dB difference in power density.

NC

1844. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:48:30 UTC
From: fractenna@aol.com
Message-ID: <20000910074830.08289.00000608@ng-mf1.aol.com>
Source record: 181012

>
> Well Mr. Lewallen, I am prepared to aptly demonstrate that your premise is
> incorrect, and thus your motivationn is, at least ,suspect.
>
> I can, and will, deliberately re-post a where I not only ADMITTED and error,
> but CORRECTED it.
>
> I will, in doing so, require your public apology for said outraegous and
> incoorect characterization.
>
> Do you state, without any hestitation, that your statement is correct and
thus
> any evidence to the contrary will produce said apology?
>
> NC

Yes. I hope it's more significant than a typo, though, although I'll
apologize even if you submit evidence of ever having corrected one of
those on the newsgroup.

Roy Lewallen, W7EL

Here is a post from LAST WEEK in which I corrected my error and corroborated
Bart's correct value. I thus ADMITTED MY ERROR and CORRECTED IT.

The post is corona 'detector?' on THIS NG

Fractenna said--

****
>The
>ultrasonic wavelength is roughly 3 hundredths of an inch

This is wrong. The unit is feet. Thus Bart is correct in stating the wavelength
is about 0.3 inches.

Best,
Chip N1IR
**********8

NC

1845. Re: Biggest money sucking antenna ever?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:51:48 UTC
From: fractenna@aol.com
Message-ID: <20000910075148.08264.00000506@ng-mf1.aol.com>
Source record: 181013

>
>Here we go with biggest money sucking antenna project, way to go, maybe they
>can discover decent program that is worthwile watching.
>Is Freak ET? Maybe that's why you people don't understand him.
>
>look at
>http://www.sunday-times.co.uk/news/pages/sti/2000/09/10/stifgnnws01001.html
>
>snip, snip
>
>"Scientists hope to detect television and radio transmissions, or signals
>broadcast by alien civilisations. "We will use it to survey stars up to 1,000
>light years away from us," said Jill Tarter, a leading researcher at the
>Search
>for Extra-Terrestrial Intelligence (Seti) institute in America. Seti's
>instruments are only powerful enough to examine several hundred stars. "
>
>lotsa snips
>
>Yuri
>

Yuri, if something is at the frontier of telecom, you hate it. Case in point.

NC

1846. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:52:02 UTC
From: w1rfi@aol.com
Message-ID: <20000910075202.20138.00000564@ng-da1.aol.com>
Source record: 181014

>From: fractenna@aol.com (Fractenna)

>An order of magnitude voltage difference is a 10 dB voltage difference. It
>corresponds to a 20 dB difference in POWER. NOT voltage.

There are not voltage dB and power dB; there are only dB.

>Either you lock into the definition of dB with respect to POWER ONLY or you
>don't.

Exactly, which is why dB = 10log(P1/P2) = 10log(E1^2/E2^2) or 20log(E1/E2).

>In the first case, the comparison of 2 values on V/m can NEVER give power and
>thus you cannot give a dB value.

If you square the values, the comparison of 2 values in V/m can give you a
power ratio, and for this you can give a dB value.

>In the second, for an order of magnitude
>difference, it is a 10 dB difference in V/m, and a 20 dB difference in power
>density.

There are not voltage dB and power dB; there are only dB.

73,
Ed Hare, W1RFI

1847. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 11:55:54 UTC
From: fractenna@aol.com
Message-ID: <20000910075554.08289.00000610@ng-mf1.aol.com>
Source record: 181015

>Volts per meter have exactly the same relationship to watts per square
>meter as
>volts have to watts. Chip`s point may be that meters versus square
>meters are not the same as volts versus watts. He is mistaken if he
>thinks this is significant in our discussion.
>
>From the inventors of te decibel, AT&T, and their Principles of
>Electricity",
>"---the new unit, called the decibel (abreviated "db"), represents
>always a fixed percentage reduction in power no matter what frequency is
>involved.----
>No. of db = N = 10 log P1 / Po
>or
>N = 20 log I1 / Io
>Although in the above we have been considering the decibel in connection
>with measurements of loss or attenuation, it is equally useful in the
>measurement of gain such as that given by a telephone repeater.----"
>
>John Cunningham in "The Complete Broadcast Handbook" is plain spoken. He
>says:
>Voltage is equal to the square root of the power times the resistance.
>Thus we can say that the field intensity in volts per meter is given by
>the square root of the watts per square meter, then multiplied by 377
>ohms.
>
>Best regards, Richard Harrison, KB5WZI
>

I've never tried it, but I do feel like I should be hitting my head against a
wall because it feels so good when i stop....:-)

You can never get POWER from a measurement of V/m. Other info is needed.

Just looking at the units tells you it is incompatible with that.

73
Chip N1IR

1848. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 12:07:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BB799B.CCFF7331@eznec.com>
Source record: 181016

Fractenna wrote:
>
> >An order of magnitude difference in two voltages (across the same
> >resistance) is 20 dB. This will result in a difference in the power
> >dissipated by the resistance of 20 dB.
> >
> >Roy Lewallen, W7EL
> >
>
> An order of magnitude voltage difference is a 10 dB voltage difference. It
> corresponds to a 20 dB difference in POWER. NOT voltage.
>
> Either you lock into the definition of dB with respect to POWER ONLY or you
> don't.
>
> In the first case, the comparison of 2 values on V/m can NEVER give power and
> thus you cannot give a dB value. In the second, for an order of magnitude
> difference, it is a 10 dB difference in V/m, and a 20 dB difference in power
> density.
>
> NC

It's not clear why you've changed from talking about voltage to V/m.

The ratio of two voltages is given in any text, from beginner to college level, as 20 * log(V2/V1). Sometimes, as in the IEEE Dictionary definition, a condition is placed on the voltages that they be measured across the same resistance(*). An order of magnitude voltage ratio is clearly 20 dB. How you get 10 from 20 * log(10) escapes me.

Surely you have an ARRL Handbook, Reference Data for Radio Engineers, an IEEE Dictionary, Terman's Radio Engineering, or list of example questions for the Technician/General amateur license? If not, I'd be glad to fax you a copy of the equation from any of these (except the exam questions, which I don't have).

I won't bother continuing to correct you. Interested readers can look up the formula in a very wide variety of texts. You may have the last word -- the floor is yours.

Roy Lewallen, W7EL

(*)When they are, an N dB voltage change results in an N dB power change.

1849. Re: Antenna measurement short course

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 12:08:13 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <pJKu5.3750$Ek.12621@newsfeed.slurp.net>
Source record: 181017

Some one buy him a one-way ticket to the antenna-purgatorium so he can participate by seti-link.

K3BHJ

1850. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-10 12:15:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39BB7B77.9EE1201A@eznec.com>
Source record: 181018

I humbly apologize to Chip and all the readers of this newsgroup. My
statement that "Chip won't
ever, ever, change his mind or admit to an error, no matter how obvious
or well documented it is." was mistaken, as he has shown us.

Roy Lewallen, W7EL

Fractenna wrote:
>
> >
> > Well Mr. Lewallen, I am prepared to aptly demonstrate that your premise is
> > incorrect, and thus your motivationn is, at least ,suspect.
> >
> > I can, and will, deliberately re-post a where I not only ADMITTED and error,
> > but CORRECTED it.
> >
> > I will, in doing so, require your public apology for said outraegous and
> > incoorect characterization.
> >
> > Do you state, without any hestitation, that your statement is correct and
> thus
> > any evidence to the contrary will produce said apology?
> >
> > NC
>
> Yes. I hope it's more significant than a typo, though, although I'll
> apologize even if you submit evidence of ever having corrected one of
> those on the newsgroup.
>
> Roy Lewallen, W7EL
>
> --
> Here is a post from LAST WEEK in which I corrected my error and corroborated
> Bart's correct value. I thus ADMITTED MY ERROR and CORRECTED IT.
>
> The post is corona 'detector?' on THIS NG
>
> Fractenna said--
>
> **
> >The
> >ultrasonic wavelength is roughly 3 hundredths of an inch
>
> This is wrong. The unit is feet. Thus Bart is correct in stating the wavelength
> is about 0.3 inches.

>
> Best,
> Chip N1IR
> **8
> --
> -------
>
> NC

1851. Troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39BFF9E7.A3B76D90@hiwaay.net>
Source record: 180919

Troll
There is no known relationship between the length of wire in a fractal
antenna and the frequency at which it is resonant.

This statement is true now, and has been true for the known past.

Does anyone doubt this?

Bill

1852. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39C01926.81ADD6EE@qth.com>
Source record: 180920
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

JUst use plastic or rubber jacketed wire...I do on my loop, no
trouble...73 Murray K5MDM Could get a bit different in a rain storm...

hpmaxim@my-deja.com wrote:

> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> Many thanks 73 de Gene
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

[One or more binary attachments are retained only in the source text.]

1853. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000913183749.00174.00000214@ng-da1.aol.com>
Source record: 180921

>
>
>
>Fractenna wrote:
>>
>> Re-Post!
>>
>> Hurry! Time running out!
>>
>> I will be happy to give you feedback on your EZNEC file before you
>'officially'
>> enter. Will do so until 15 Sept.
>
>Please admit that you have no intention of paying anyone $1000.
>
Why not?

I have a confession: if there is a winner I will pay this person within 24
hours of the deadline.

So far, no winners.

I will be happy to continue to give feedback on entries, at least for a few
more days.

73
Chip N1IR

1854. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000913184100.00174.00000215@ng-da1.aol.com>
Source record: 180922

>Let's see... Cushcraft about a gazillion antennas delivered to users
>worldwide. Freaktenna - 0.
>

I don't know what a frektenna is, but your statement is correct with respect to
fractal antennas. Our customers are OEM's--not end users.

No retail.

See

http://www.fractenna.com

for web site updates in the next week:!:-)

73
Chip N1IR

1855. Zen archery

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C00441.EC0E26E4@eznec.com>
Source record: 180923

Just heard this deep thought. . .

Zen archery- shoot arrow- find arrow- Say,"here is target".
target.

Dad

1856. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C0022D.A963D3D9@bigfoot.com>
Source record: 180924

hpmaxim@my-deja.com wrote:
> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves.

Dacron/nylon rope makes pretty a good insulator when it's dry.
--
http://www.mindspring.com/~w6rca

1857. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C00565.3E758B21@oio.net>
Source record: 180925

hpmaxim@my-deja.com wrote:
>
> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> Many thanks 73 de Gene
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Gene,
Use a neutral color, or a brown insulated wire for your antenna.
Wouldn't worry too much about high voltage and starting a fire in
the trees. Granted, there is high voltages present, but I've never
seen a tree burn from RF.
'Doc

1858. Re: Zen archery

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C00844.552209C8@eznec.com>
Source record: 180926

I apologize -- the browser struck again. This was intended to go to my son as email, not be posted. Thanks, Bill, for the insight.

Roy Lewallen

Roy Lewallen wrote:
>
> Just heard this deep thought. . .
>
> Zen archery- shoot arrow- find arrow- Say,"here is target".
> target.
>
> Dad

1859. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C007DD.5E99C5B7@uci.edu>
Source record: 180927

Fractenna wrote:

> I have a confession: if there is a winner I will pay this person within 24
> hours of the deadline.

Please admit that you have no intention of declaring anyone a winner.

1860. Re: Zen archery

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39BFFF0E.E82729E6@GTE.net>
Source record: 180928

Roy Lewallen wrote:

> Just heard this deep thought. . .
>
> Zen archery- shoot arrow- find arrow- Say,"here is target".
> target.
>
> Dad

Hi Roy,
Is the U.S. equivalent of this called Monday Morning Quarterbacking?

Dale W4OP

1861. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000913192340.11272.00000182@ng-ff1.aol.com>
Source record: 180929

>I don't know what a frektenna is, but your statement is correct with respect
>to
>fractal antennas. Our customers are OEM's--not end users.
>
>No retail.
>
>See
>
><A
HREF="http://members.aol.com/_ht_a/Arrow146/index.html">http://www.fracten
na.com</A>
>
> for web site updates in the next week:!:-)
>
>73
>Chip N1IR

He has some real good antennas, just click on the link
above.

1862. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <aj60ssg3iga2obla1foqo0pggvsmcb96ib@4ax.com>
Source record: 180930

On Wed, 13 Sep 2000 17:39:41 -0500, CAM <cam2338@bigfoot.com> wrote:

>Dacron/nylon rope makes pretty a good insulator when it's dry.

Nylon monofilament fishing line will dry out much faster.

73, Bill W7TI

1863. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <rk60sskej4nvuncrjlsr113bbire4ea02a@4ax.com>
Source record: 180931

On Wed, 13 Sep 2000 17:53:25 -0500, 'Doc <w5lz@oio.net> wrote:

>Granted, there is high voltages present, but I've never
>seen a tree burn from RF.

Nor have I actually seen it, but fires have been reported.

73, Bill W7TI

1864. manual for a Force 12 EF320X240S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Jeff/kb2wqm <kb2wqm@amsat.org>
Message-ID: <39c01b22@news.dandy.net>
Source record: 180932
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.swap

I need a copy of the manual for a Force 12 EF 320X240S I just picked up in a used tower, and got the Force 12 as part of the buy. Anyone who has this antenna care to zerox a copy of the manual for me? I will send a self addressed stamped envelope. I also would consider selling the antenna, if anyone is interested.

73 Jeff kb2wqm

1865. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39C024DC.2FFE@bellsouth.net>
Source record: 180933

You wil heed some sort of insulators. How about this: go to a plastics supply company and get some green Lexan--the kind often used in welding screens. They may even have some scraps. Drill holes on the ends for feeding the wire thru. The Lexan will blend into the leaves. If you live in cold climate, you might try to go through cedars or spruce trees. Even small strips of 2 litre drink bottles will serve as temporary insulators.

73

Jerry
K4KWH

> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> Many thanks 73 de Gene
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1866. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39C0264C.1375@bellsouth.net>
Source record: 180934

Isn't this why Don Johnson referred to the Hamstick in his book as a
"Dummy-load-on-a-stick"? LOL! Pretty accurate description IMHO! LOL!

Jerry
K4KWH
> Assuming the 0 dB mobile antenna is radiating ten watts,
> the 75m Hamstick would be radiating less than one watt using
> the same transceiver.
> --
> http://www.mindspring.com/~w6rca

1867. Re: Kite design for 160M "wind resistance"!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39C02370.AF8CFEA3@roadrunner.nf.net>
Source record: 180935

Gunner Dave wrote:

> Jon,
> As A died in the wool kite flyer my recommendation is as follows, Use A
> Rokkaku style kite (Japanese, six sided) Use your search engine to find
> plans.
> I do not know the weight or wind resistance of your antenna, but a one
> meter wide "ROK" can tear apart a 50 lb. line . I use a 2 meter "Rok" to
> carry a video cam with 440 tx/id overlay board/sound card & batteries.
> If I can help in any way please email me.
> Dave Kc6old
>
> Jon M0BQQ wrote:
> >
> > I am getting interested in 160m and would like to try using a kite to lift
> > the antenna, can anyone he;p me with the design as I have had big problems
> > finding anything suitable on the net.
> >
> > Thanks in advance.
> >
> > Jon M0BQQ

Emulating Marconi who in 1901, about six miles from here used a kite (after his balloon blew away) to receivee the first transatlantic wireless message on Signal Hill St. John's, Newfoundland.

I seem to rember that wind pressure 'P' in pounds per square foot was/is;
P = [Velocity of wind (in mph), squared,] times 0.003 !
Thus;
At 10 mph. P = (10 X 10) X 0.003 = 0.3 lbs per sq.ft.
At 20 mph P = (20 X 20) X 0.003 = 1.2 lbs per
At 30 mph P = 2.7 lbs per ***
At 40 mph P = 4.8 lbs per
At 50 mph P = 7.5 lbs per
At 80 mph P = 19 lbs per
At 100 mph P = 30 lbs per .....
These are with surface perpendicular to the wind.
So don't try and hold onto a loose door or 4 by 8 sheet of plywood in a breeze!
So with a kite angled to the wind etc. you'd have to use what is it, the cosine or something?

So with a 'one square metre' kite, that's about 10 square feet roughly, in a 30 mph wind *** you could get well over 200 pounds, of 'pull', especially during a gust!

Don't get 'bowled over' by your idea! And, if you happen to let go of the string we'll be able to wave at it as it flies over Newfoundland, eastern Canada, on its way to North America! Oh, no hold on, the prevailing wind is usually the other way!

1868. FA: rhombic terminating resistor, large

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: VE7SEZ <tkpoustie@nospamtelus.net>
Message-ID: <JBVv5.70123$47.904565@news.bc.tac.net>
Source record: 180936

It's my last one! If you ever plan to put up a resistor terminated wire antenna you may want to have a look.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=436983241

Item description:

Beautifully made heavy duty 625 ohm terminating resistor in glass insulating tube, on porcelain holder with holes for mounting to wire or rope. Has adjustable static gap rods for lightning/static protection. About 7 inches overall.

de Tim, VE7SEZ

1869. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26320-39C01FD3-33@storefull-116.iap.bryant.webtv.net>
Source record: 180937

Old Biker, KA3DWW wrote:
"And finally, what kind of testing do we need to foster these goals?"
("Developing, testing and perfecting new methods until they become
applicable to commercial comms?")

Obviously we need require only demonstrated knowledge of the rules and
proper operating practices. The bar should be lowered as much as
possible to admit as many users as possible to the bands. If crowding
results, a large number of hams will likely get more band space.
Politics is like that!

The average ham should look a lot more like the face of America and not
like a bunch of freaky geezers.

With a big market for new technology in the ham bands, suppliers will
respond with the latest and greatest for hams to evaluate in the best
way, that is in the hands of demanding end users.

Best regards, Richard JHarrison, KB5WZI

1870. Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Terry Sanford <tsanford@roadrunner.nf.net>
Message-ID: <39C027FE.EF2C37E8@roadrunner.nf.net>
Source record: 180938

I have the possibilty that I could drape some 1000 feet and maybe up to 1000 metres of fine gauge (insulated or varnish covered ex transformer winding wire etc.) in some trees in a west east direction.
One end would be on our propeerty and the other across some rough woodlands. There would be no prblem getting permission from the other owners.
How straight I could do it is doubtful; also how high I could get it, maybe 10 feet? Also the land slopes from west to east, towards the coast, but is several kilometres from it. You get a clear view of the ocean horizon from our land.
Frankly the wire wuldn't last very long! Maybe a few weeks, in summer?
It would be possible to put a terminating resistor at the east end of the wire connected to some sort of ground rod.
Obviously what I'm thinking about is a 'rough and ready' Beverage, with its end towards Europe; the terminating resistor idea being to attenuate/absorb signals from t'other direction i.e. eastern North America.
Crazy idea maybe but comments anyone?
Purpose to receive European broadcasting and long wave stations, but also 160 etc.
Terry S. Torbay, east coast of Newfoundland, Canada.

1871. Re: Zen archery

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C02EA1.EBD8DB03@hiwaay.net>
Source record: 180939

This is the fractanal way of designing an antenna-

1. bend wire
2. measure frequency
3. say- "oops"
4. adjust wire length
5. go to step 1

Notice- this process makes one "loopy"

Bill

Dale Parfitt wrote:
>
> Roy Lewallen wrote:
>
> > Just heard this deep thought. . .
> >
> > Zen archery- shoot arrow- find arrow- Say,"here is target".
> > target.
> >
> > Dad
>
> Hi Roy,
> Is the U.S. equivalent of this called Monday Morning Quarterbacking?
>
> Dale W4OP

1872. SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <39c03943$1@news.microsoft.com>
Source record: 180940

Would appreciate getting the algorithm/equation to calculate SWR given separate forward and reverse voltages. Am in the process of writing the software for a homebrew microprocessor controlled auto-tuner. The coupler returns separate forward and reverse voltages in the 0 to 5V range depending on SWR. Plan to convert both voltages using an 8 bit, 8 channel A/D.

For those that have done this before, are there any suggestions for potential gotcha's????

Thanks in advance,

-rob N7QT

email: robertfa@microsoft.com

1873. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: chantey <chantey@shore.net>
Message-ID: <BTWv5.1111$kU4.100917@news.shore.net>
Source record: 180941

A good reference article for the design of mobile antennas is
"Short Antennas for Mobile Operation" by J. S. Belrose, VE3BLW,
who I assume is the same Belrose who has been delighting us
with antenna articles for years. It's on the QSTView CDROM and was published
in QST, September 1953, p30.

(I put the calculations into a spread sheet and soon will be winding lots of
turns to load up a 102" CB whip on 160M.)

Regards,
Bob, N1RC

"Bart Rowlett" <bart@wb6hqk.ampr.org> wrote in message
news:39BF9054.9E30EDC3@wb6hqk.ampr.org...
> btakacs@nccw.NET wrote:
> >
> > Where does one go to find out the results of antenna shoot outs that you
> > would see here every so often? Some where that you don't have to read
all
> > this Fractal BS that has been going on forever.
> > Bill/K8VP
>
> Just ask:
>
> SANTA BARBARA ANTENNA TRIALS - AUGUST 17, 1997
>
> Here are the results from the 75 meter mobile antenna trials
> held near Santa Barbara on August 17 1997. The callsigns and names
> are self explainatory. The numbers, typically between 59.0 and 65.0 are
> the measured field strength readings in dB. The field strength meter
> measured
> the horizontal magnetic field component of the radiated signal at a
> distance
> of approximatly 800 meters and accuratly represents the vertically
> polarized
> (electric field) groundwave, which is proportional to the low angle
> skywave
> radiation suitable for working DX. The measurements do not necessarily
> reflect the performance of the antenna system for working short skip
> (NVIS)
> but are generally a useful indicator of overall performance. In most
> cases, the measurements were done at 3995 kHz but we allowed the
> frequency
> to be lowered if required to achieve adequate power transfer. The power
> input to the antenna system was taken as the difference between forward

> and reflected power as measured with a Bird wattmeter anywhere the
> operator could provide feedline access, usually at the rig antenna
> connector.
> The forward power was typically between 40 and 50 watts and all readings
> have
> been normalized. The absolute value of the field strength measurements
> have
> no meaning whatsoever but the differences accuratly reflect antenna
> system
> differences. Note, for 75 meter mobile installations, the vehicle is a
> major
> part of the antenna system and the data reflects entire antenna system
> performance. In some cases, extensive bonding of body and frame members
> has
> been done to reduce losses and improve counterpoise effectiveness.
> Unless
> stated, all vehicles were legal to drive with in the state of California
> with
> the antenna systems deployed and presumably operable. When the field
> strength
> trial began at around 0800, there was a slight drizzle which tended to
> detune (down frequency) the open air bugcatcher coils by around 20 kHz.
> The
> earlier measurements made with the bugcatchers tended to be a couple of
> tenths of a dB below the later measurements and I believe that to be as
> a
> result of water on the coil and not a shift in antenna range
> calibration. In
> the past we have found the same equipment to be repeatable to within +-
> 0.15 dB
> or better. The comparisons can be expected to be accurate to +- 0.2 dB.
>
> RESULTS
>
> CAPACITY HATS: These antennas had capacity hats of some sort for top
> loading.
>
> K7POF - BOB 64.8 (lST RUN) 65.1 (2ND RUN LATER IN THE DAY)
> W6MMA - VERN 64.9
> W6RCA - CECIL 64.9
> N6BT - TOM 63.8 (lST RUN) 64.8 (2ND RUN) 66.0 REAR ASPECT
> K6SDQ - JIM 63.2
> KE6DM - BOB 63.0
> K6MB - JAY 59.2
>
> BUGCATCHER TYPE: Whip only, no top hat.
>
> K7POF - BOB 63.2
> WA6JPR - WALLY 62.3
> WB6HQK - BART 61.7

> K6MB - JAY 60.4
> W6RCA - CECIL 58.3
> W6JEO - CARL 57.7
> W5GYJ - JIM 57.2
> KC6MAJ - PETER 52.7
> WB6ZJA - JIM 51.9
> SCREWDRIVER TYPE: Various manufacturers
>
> KE6ELQ - FRANK 64.3 DOES NOT MEET VEHICLE CODE - 20' TIP TO GROUND.
> W6MMA - VERN 63.2
> K6RCL - DENNIS 62.6
> WA6HEY - JAKE 62.1
> K7EZ - ROGER 61.9
> KA6TAY - GREG 61.8
>
> OTHER:
> W6YY -SANFORD 66.7 DOES NOT MEET VEHICLE CODE - 30ft ANT, TOP OF
> MOTORHOME
> WA6JPR - WALLY 61.1 BANDHOPPER
> WA6JPR - WALLY 59.5 BANDSPANNER
> WA6JPR - WALLY 58.3 STAINLESS STEEL FORTEX COIL
> KK5YY - GERALD 56.4 ROOFTOP MOUNTED OUTBACKER WITH TRIPLE MAGNET
> MOUNT
> W6RCA - CECIL 52.2 11.5' WHIP (NO COIL)
>
> ADDITIONAL DETAILS:
>
> CAPACITY HATS:
>
> K7POF - CENTER-LOADED, LARGE CAPACITY HAT, WIRES TO FRONT.
> W6MMA - BBS SCREWDRIVER, 5' HAT WITH 18 RADIALS, R. FRONT BUMPER.
> W6RCA - HOMEBREW MID-BACK BUMPER, OVER THE VEHICLE,TOWARD FRONT. 4:1
> UNUN
> N6BT - FORCE TWELVE PLUMBER'S DELIGHT ALL AROUND VEHICLE.
> K6SDQ - CENTER-LOADED WITH 42" HAT @ 11 ABOVE COIL. LEFT REAR.
> KE6DM - CENTER-LOADED MID-BACK BUMPER 17" HAT.
> K6MB - LEFT, REAR MOUNT, CENTER-LOADED WITH TWO WIRES TOWARD FRONT.
>
> BUGCATCHER:
>
> K7POF - MASTER MOBILE, LEFT REAR, 7011 BASE, 64" WHIP.
> WA6JPR - BUGCATCHER, MID-BACK BUMPER MOUNT. (NO PAPERWORK)
> WB6HQK - 5.25 INCH DIA COIL ON 2.5 FOOT MAST MOUNTED ON TONNEAU COVER,
> 72 WHIP
> K6MB - BUGCATCHER, LEFT REAR.
> W6RCA - TRAILER HITCH MOUNT, 3' BASE, 6X6" COIL, 5' TOP.
> W6JEO - BASE-LOADED, 2x12" COIL, 62.511 TOP, 3.5' GND TO BASE.
> W5GYJ - BASE-LOADED, 8x12" COIL, 7' TOP, 3' GND TO BASE. (GLA COIL)
> KC6MAJ - CENTER-LOADED, ON TRUNK, 3X5" COIL. (HUSTLER COIL)
> WB6ZJA - TEXAS B.C. LEFT ABAFT CAB MOUNT, 16"-HAT 12" ABOVE COIL.

>
> SCREWDRIVER:
>
> W6MMA - AS ABOVE SANS HAT.
> K6RCL - HIGH SIERRA 1000, CNTR-LEFT MOUNT, GMC P.U.
> WA6HEY - W6AAQ ANT., REAR, LEFT MOUNT @ 43" GND TO BASE.
> K7EZ - W6AAG ANT., REAR MOUNT, 36" GND TO BASE.
> KA6TAY - HIGH SIERRA, CNTR REAR BUMPER MOUNT 16" GND TO BASE.
>
> OTHER:
>
> WA6JPR - BANDHOPPER.
> WA6JPR - BANDSPANNER.
> WA6JPR - STAINLESS STEEL.
> KK5YY - OUTBACKER,CNTR-ROOF, MAG-MOUNT.
> W6RCA - 11.5' WHIP (NO COIL) TRAILER HITCH MOUNT.
>
> Additional Notes:
>
> KC6MAJ and WB6ZJA apparantly had grounding problems and the results are
> not typical of similar installations.
>
> These are the final results but updates may occur as additional
> information
> becomes available. If you have any additional information or errors to
> report, please let me know.
>
> If you have any questions please feel free to email me:
> bart@wb6hqk.ampr.org
>
> bart
> wb6hqk

1874. Help RE. triband yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Steve Zumbrun <zumbruns@mail.stlukes.org>
Message-ID: <8PWv5.428$EZ2.995@newsfeed.slurp.net>
Source record: 180942

I'm putting up new 55 foot tower. I need some help with the antenna. I want to put up a triband yagi. I live in Iowa and we get alot of wind and ice here. I would appreciate comments from users of various tribanders such as Force 12, M2, Cushcraft and Mosley antennas as to there strength, durability, etc. Thanks and 73, Steve W0SZ

1875. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C03FAA.AD8B9FE9@eznec.com>
Source record: 180943

The Belrose most familiar to amateurs and professionals alike is John (Jack) Belrose, VE2CV. Perhaps they're related; I know Jack has several children.

Roy Lewallen, W7EL

chantey wrote:
>
> A good reference article for the design of mobile antennas is
> "Short Antennas for Mobile Operation" by J. S. Belrose, VE3BLW,
> who I assume is the same Belrose who has been delighting us
> with antenna articles for years. It's on the QSTView CDROM and was published
> in QST, September 1953, p30.
>
> (I put the calculations into a spread sheet and soon will be winding lots of
> turns to load up a 102" CB whip on 160M.)
>
> Regards,
> Bob, N1RC

1876. 2m/70cm Base Antenna Comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: "J. Marcus Ziegler" <UseMyLastName@accesscom.com>
Message-ID: <ss0g8j8hct6180@corp.supernews.com>
Source record: 180944

Can anyone suggest a source of information comparing various 2m/70cm base station antennas from companies like Comet, Cushcraft and Diamond (and others)?
I live in a deep canyon and could use some more gain than my existing discone just to hit the local repeaters.

Antennas like the Cushcraft AR270/AR270B, Comet GP-3/GP-6/GP-9 and Diamond X-50A/X-200A/X-510MA.

I have looked at eHam and the ARRL manufacturers reviews and didn't find much information there.

- Marc, W6ZZZ, w6zzz@arrl.net
Loma Prieta Amateur Radio Club -
http://www.accesscom.com/~ziegler/lparc.html

1877. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <1187-39C03C9C-44@storefull-112.iap.bryant.webtv.net>
Source record: 180945

Richard Clark wrote:
"What one fool can do, another can."

Richard, is that a very small book with a red cover? Those words sound very familiar and I think I read them in a red book about 50 years ago.

Best regards, Richard Harrison, KB5WZI

1878. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C04756.23E7@wt.net>
Source record: 180946

'Doc wrote:
>
> hpmaxim@my-deja.com wrote:
> >
> > Hi All - Just moved to a new QTH with stringent restrictions. I can
> > get a very long and fairly invisible wire up into the trees but there
> > is NO possibility of using insulators to seperate it from the branches
> > and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> > Many thanks 73 de Gene
> >
> > Sent via Deja.com http://www.deja.com/
> > Before you buy.
>
> Gene,
> Use a neutral color, or a brown insulated wire for your antenna.
> Wouldn't worry too much about high voltage and starting a fire in
> the trees. Granted, there is high voltages present, but I've never
> seen a tree burn from RF.
> 'Doc

I haven't burnt one up, but I've gotten pretty close. But the branch I toasted was fairly green and had leaves on it. And was near the end of a dipole. It tended to look like I had held a lighter up to it for a while. Really fried, but hard to light as it was green. So I don't doubt its possible to start a fire, but seems to me a branch dry enough to do this would act as a pretty good insulator, so really shouldn't be a problem. I think it's damp green trees and water that will give you the most trouble. Or has been in my case anyway. Also the time I toasted the tree was with a good KW of power. Maybe a bit more. "1300-1400w". I since changed to insulated wire and have had no trouble at all. I've had many wires thru trees with no trouble at all. "I have 440 ft of wire thru trees at this time" It's only at the high voltage points that you will really have many problems. IE: the ends on dipoles. So if anything keep the ends insulated and you've got 85% of it licked. The house wire I use now seems to insulate quite well. But I imagine constant rubbing could wear it off after a while if the tree moves alot. Hasn't really been a problem here yet. MK
--
http://web.wt.net/~nm5k

1879. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6534-39C043CA-31@storefull-114.iap.bryant.webtv.net>
Source record: 180947

Richard Clark wrote:
"What one fool can do, another can."

The little red book was fun to read. Instead of saying, we`re going to initiate an investigation of differentiation through the delta process, the author simply says, were going to take a little bit of x and a little bit of y and---. I remember thinking, now that`s the way to write instructions! I`d like to find and read that little book again.

Best regards, Richard Harrison, KB5WZI

1880. Re: no code but harder technical tests? was:Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6533-39C0486D-89@storefull-114.iap.bryant.webtv.net>
Source record: 180948

Bill, W7TI wrote:
"To do that (not cause harm to other stations) requires a certain amount of technical knowledge, regulatory knowledge, and basic operating knowledge,"

Agreed, but the needed technical knowledge is minimal. There are many automobile drivers who hardly know the difference between a spark plug and a carburetor yet are safer drivers than some automotive experts behind the wheel.

Best regards, Richard Harrison, KB5WZI

1881. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C04D5C.244FA62E@mindspring.com>
Source record: 180949

>
>
> If the face of America is Jerry Springfield you can keep it.

Do you mean Jerry Springer or Rick Springfield?

1882. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <6534-39C04D03-34@storefull-114.iap.bryant.webtv.net>
Source record: 180950

wgewald@att.net wrote:
"An explanation which is even more cbscure than the thing it purports to explain. Ignotum Per Ignotius n."

A bumper sticker example: Eschew Obfuscation

Best regards, Richard Harrison, KB5WZI

1883. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C055BD.6E3D8C3B@eznec.com>
Source record: 180951

```
SWR = (Vf + Vr) / (Vf - Vr)

Roy Lewallen, W7EL

Robert Fanfant wrote:
>
> Would appreciate getting the algorithm/equation to calculate SWR given
> separate forward and reverse voltages. Am in the process of writing the
> software for a homebrew microprocessor controlled auto-tuner. The coupler
> returns separate forward and reverse voltages in the 0 to 5V range
> depending on SWR. Plan to convert both voltages using an 8 bit, 8 channel
> A/D.
>
> For those that have done this before, are there any suggestions for
> potential gotcha's????
>
> Thanks in advance,
>
> -rob N7QT
>
> email: robertfa@microsoft.com
```

1884. Re: Kite design for 160M antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8po6ac$8qg$1@uni00nw.unity.ncsu.edu>
Source record: 180952

Jon M0BQQ <jon.m0bqq@ntlworld.com> wrote:
> I am getting interested in 160m and would like to try using a kite to lift
> the antenna, can anyone he;p me with the design as I have had big problems
> finding anything suitable on the net.

> Thanks in advance.

> Jon M0BQQ

My very first field day, as a novice (a dumb one at best), I used what was called a kitoon. It was a 6 foot high T shaped baloon kite filled with helium. That held up 300 foot longwire for 24 hours, and was great fun for an unknowing novice. I would opt for a commercial baloon kite or dirigible kite as one sees at car lots, and that kind of thing for display. The main problem will be gas leakage, and the replacement of the gas. That can be expensive over a long term use. But, for a quick use like FD or some testing, it should do well.

Bob/NA4G

1885. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8pon4k$s24$2@uni00nw.unity.ncsu.edu>
Source record: 180953

hpmaxim@my-deja.com wrote:
> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> Many thanks 73 de Gene

Don't worry about it. Just get it up and run with it.
A few leaves can alter things a bit, but not enough on a simple antenna
to make a great difference. The insulation on the wire will usually
suffice unless you plan to run a kw, where more stringent requirements
would be better. The enamel coating on magnet wire is reasonably
tough and will last a season or so. It is cheap enough that you can
put a new one up every year. Use colored line that is mostly green or
grey if you can find it, and try to find cord that is braided rather
than twisted, since it rolls less in the tree limbs. I find that a
classic green 66 foot roll of bell wire makes a fine 160/80M antenna,
and, if you cut it for 90 or 45 feet, works fine on 40M too.
Just keep all antennas away from any power lines.

Good Luck....

Bob/NA4G

1886. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8pongd$s24$3@uni00nw.unity.ncsu.edu>
Source record: 180954

Bill Turner <w7ti@jps.net> wrote:
> You really need to figure out a way to insulate it from the trees.
> Even small amounts of power can generate large amounts of voltage at
> certain points along the wire - enough to start a fire on a dry day.

Bill, do you have any additional information on this?

Bob/NA4G

> 73, Bill W7TI

1887. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <8ppdi8$t71$1@box6.cho.cstone.net>
Source record: 180955

Roger that! The spikes for climbing trees are longer than pole spikes.

Bill

"K1BQT" <k1bqt@aol.com> wrote in message
news:20000912133355.13269.00000101@ng-cu1.aol.com...
> Never attempt to climb a pine tree with lineman pole spikes, either. Did
it as
> a teenager, and my private parts are still up where my belly button
belongs!
>
> Rick K1BQT

1888. N.L. Cohen Ph.D. THEIF AND LIER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 07:02:49 UTC
From: Anonymous <nobody@remailer.ch>
Message-ID: <94f98f6e032f351d8e57ae777f708513@remailer.ch>
Source record: 180956

N.L. Cohen We have converted all letters from you and will be placing on web for all world to see as you have asked.
We have now received translation of US patent office document and all at Institute have good laugh at your stupid description and wrong application of fractal wave theory, you still not abel to explain theory of fractal antenna how can you when your listen to Misha who not know full information and you physics knowledge is limited and not applicable to fractal wave antenna fields.
You must first learn CORRECT gravitational wave theory not the BS theory that you use and write about in Cornell Astrophysics 85 document which only apply to gravitatonal lens.
We now understand that patent office only give you utility patent, Office must have smart people working They know you still not understand fractal element antennas and correct mathematics.
We have people check your company and see that you transfer to home address from your father8217s location in Florida on 16/08/00 and that you are owner and president.
Institute has sent information to president of Boston University and our advocate in Moscow who will be talking to patent office about theft of Institute Intellectual information.

Boris
I Know Truth

1889. N.L.COHEN Ph.D. FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 07:34:57 UTC
From: Private User <See.Comment.Header@[127.1]>
Message-ID: <HQJ2ELIK36782.1492708333@anonymous.poster>
Source record: 180957

N.L.COHEN Ph.D. N1IR we finally receive copy of translated American utility patent and all members of Institute have a good lafter after reading your stupid and WRONG explanation in document.
We now know 100 positive that you still not understand how fractal elements antenna works and we are very happy that patent office must have more smarter person then you they only give you a patent for simplistic match system to fractal element we have sent letter to Moscow advocate who functions in patent maters and he will be contacting you and Boston University authorities about violation of intellectuals property of Institute. .
As you asked we are working on bringing up web site that will show all letters from you to Institute from 1993 and 1994 we have scanned and converted to image format.

Boris
I KnowTruth

1890. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 08:24:25 UTC
From: sideband <sideband@cac.net.dontspamme>
Message-ID: <sceurs4f0lv62097bog8q6garbem4p97br@4ax.com>
Source record: 180958

What does DXCC stand for anyway?

Didn't Exchange Code with Chip?

::duck::

-SSB

On or about Tue, 12 Sep 2000 20:14:02 GMT, ehsjr@bellatlantic.net,
using the forum rec.radio.amateur.antenna did say:

:I'm not familiar with a Kahr. How many Db is it? If
:I bend it into a whole bunch of directions, will I be
:able to load it? Will it work on 20 meters after
:bending, and can I work DXCC with it in 30
:hours or less? (Or was that 30 Db or less?
:I'm so confused!)
:
:K1BQT wrote:
:
:> >A lady I square dance with in Huntsville has a really sweet purse handgun, a
:> Lady Kahr 9mm. She got miffed at me when I
:> told her a 9mm was like a .45 on stun. :-)<
:>
:> Nice thing about a Kahr is, should it jam, she can throw it at her attacker and
:> take his head off (heavy little sucker). I used to have a Kahr with
:> nightsights and the elite trigger. Trouble was, the DAO pull was so smooth,
:> short, and light, it was like packing a single action in battery with no safety
:> (would you want that in your pants?). Now carry a polymer Kel-Tec K-32. To
:> dispose of it, you simply revove the magazine, then chew it up and swallow it.
:>
:> Rick K1BQT

1891. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 08:26:28 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <39BF3A34.FD8A8EEB@arrl.net>
Source record: 180959

I just cannot resist anymore.

I think Chip and company are a successful and professional troll.

lol

1892. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 08:28:09 UTC
From: sideband <sideband@cac.net.dontspamme>
Message-ID: <tjeurs8ijk9ohckg9sf3cu9k6pun6uqjln@4ax.com>
Source record: 180960

Your voices tell you that too?

Damn, I'm not the only one.

>:-{>=

-SSB

On or about Tue, 12 Sep 2000 14:12:19 -0700, Roy Lewallen
<w7el@eznec.com>, using the forum rec.radio.amateur.antenna did say:
:Now, if you'll excuse me, the voices are telling me it's time to go
:clean my guns. . .
:
:Roy Lewallen, W7EL

1893. Re: N.L. Cohen Ph.D. THEIF AND LIER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 08:34:34 UTC
From: sideband <sideband@cac.net.dontspamme>
Message-ID: <cveurscmsvi2rbhk65c32ci3vf4p32vk9f@4ax.com>
Source record: 180961

Was there a point to that? Was there a point in the first place?

If so,
99.99999999999

1894. Re: N.L.COHEN Ph.D. FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 10:56:42 UTC
From: fractenna@aol.com
Message-ID: <20000913065642.27470.00001117@ng-mg1.aol.com>
Source record: 180962

>N.L.COHEN Ph.D. N1IR we finally receive copy of translated American utility
>patent and all members of Institute have a good lafter after reading your
>stupid and WRONG explanation in document.
> We now know 100 positive that you still not understand how fractal elements
>antenna works and we are very happy that patent office must have more smarter
>person then you they only give you a patent for simplistic match system to
>fractal element we have sent letter to Moscow advocate who functions in
>patent maters and he will be contacting you and Boston University authorities
>about violation of intellectuals property of Institute. .
>As you asked we are working on bringing up web site that will show all
>letters from you to Institute from 1993 and 1994 we have scanned and
>converted to image format.
>
>Boris
>I KnowTruth
>

As I said, I have dealt with internet hoaxes before. This one will be exposed to the full measure of the law.

Your move.

NC

1895. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 10:57:45 UTC
From: fractenna@aol.com
Message-ID: <20000913065745.27470.00001118@ng-mg1.aol.com>
Source record: 180963

>>
>>So basically I've worked about a dozen new 10M DXCC countries with the
>>antenna.
>>I believe I am at 345 or 346 worked DXCC overall (I received #1 Honot Roll
>in
>>1995).
>
>Wow, far out, incredible, amazing.

Thanks.

73
Chip N1IR

1896. Re: N.L. Cohen Ph.D. THEIF AND LIER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 10:59:42 UTC
From: fractenna@aol.com
Message-ID: <20000913065942.27470.00001119@ng-mg1.aol.com>
Source record: 180964

>
>Fractenna <fractenna@aol.com> wrote:
>>>Fractenna <fractenna@aol.com> wrote:
>>>>>N.L. Cohen We have converted all letters from you and will be placing on
>>>web
>>>>>for all world to see as you have asked.
>>>
>>>> Yup; all set. Right now.
>>>
>>>> NC
>>>
>>>You are following up your own follow-ups. Again. Moron.
>>>
>>>Jim Pennino
>
>
>> I must confess I AM confused Jim: why is it not legitimate to focus and
>respond
>> on a specific excerpt to clarify and strengthen the point so made?
>
>You posted a follow-up to a posting. You than posted a follow-up to YOUR OWN
>post.
>
>Thus, in a threaded reader, it looks like three different people are posting.
>
>RTFM
>
>> Please explain what RIGHT that gives you to make a personal attack against
>me.
>
>> NC
>
>The RIGHT to express my opinion that you are an ignorant ass.
>
>Jim Pennino
>

Nope. Don't get it. Don't see it's worth any thought.

What I did was post the hoaxer's post and then expanded my response to it. If you are unhappy with that, please communicate with AOL and I will be happy to discuss.

73
Chip n1IR

1897. Re: Beta Testers for FRACTopper(TM) Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:00:46 UTC
From: fractenna@aol.com
Message-ID: <20000913070046.27470.00001120@ng-mg1.aol.com>
Source record: 180965

>What may be helpful, Chip, would be for you to outline the tests you want
>performed and allow people who feel they can do them to do so.
>

I did.

Chip N1IR

1898. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:03:42 UTC
From: fractenna@aol.com
Message-ID: <20000913070342.27470.00001121@ng-mg1.aol.com>
Source record: 180966

>>>Don't know what goes on down at Chip's place.<<
>
>>You sure don't:-)<
>
>Just an observation. But if your comment is a challenge, perhaps I should
>check my favorite dB meter (Dunn and Bradstreet)! Or let it drop.
>
>Rick K1BQT
>

Nope. You go right ahead.Say whatever you think best puts you in a certain position their Rick.

Just keep in mind that firms respond more swiftly and severely to libel and delibertaely posted inaccuracy.

73
Chip N1IR

1899. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:11:34 UTC
From: fractenna@aol.com
Message-ID: <20000913071134.27470.00001122@ng-mg1.aol.com>
Source record: 180967

>>>>Don't know what goes on down at Chip's place.<<
>>
>>>You sure don't:-)<
>>
>>Just an observation. But if your comment is a challenge, perhaps I should
>>check my favorite dB meter (Dunn and Bradstreet)! Or let it drop.
>>
>>Rick K1BQT
>>

I seem to recall you said something about preparation for an IPO by Fractal Antenna Systems,Inc. Rick. I can re-post if your memory needs refreshing. On what factual basis do you pose this information and why do you feel that it requires global, public dissemination?

In other words, what is your motivation and intent in such comments as: 'Dunn and Bradstreet' and ''pre-IPO"?

Would you agree, in any case, that inaccurate information poses grave threats to firms, no matter what the size or stage?

Would you further agree that, given several recent publicized convictions, that those who spread false information about firms on the internet, put themselves at severe risk for jail time and major fines?

With best Wishes,
Chip N1IR

1900. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:18:11 UTC
From: fractenna@aol.com
Message-ID: <20000913071811.27470.00001124@ng-mg1.aol.com>
Source record: 180968

>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000912064734.05086.00000552@ng-cd1.aol.com...
>>
>> You also fail to read my posts,discussing the obvious ability to get power
>WITH
>> ADDITIONAL INFORMATION AVAIALABLE,so why would anyone continue a dialogue
>with
>> you?
>>
>> A measurement in V/m can NEVER EVER be converted into a power.
>>
>
>Nathan:
>
>If you read my post again, you will note that I did not write it as an
>assertion that you "wrong", rather that you need to watch the subtleties in
>the statements that you present.
>
>No one in this field "converts" V/m to power (or voltage to power for that
>matter) like one would convert inches to centimeters. It is not an issue of
>unit conversion. It is an issue of determining one quantity based upon the
>measurement or knowledge of another.
>
>Reading the statement as you have written it above would lead some people to
>believe that you can NEVER EVER determine power with the knowledge of V/m.
>Clearly, we both know that this is not the case. I will agree with you that
>at some points in your discussion you did say that "without additional
>information ..". However, you were not explicit in your discussion, nor did
>you mention this in all of your posts.
>
>To gain more respect with your technical comments you really need to be
>willing to provide a more in-depth two-way discussion and provide more
>clarity to your arguments. You also have to be willing to accept that you
>are not always right (i.e. 19.24 dB versus 9.62 dB). For the most part, you
>simply provide off-the-cuff one sentence answers that always claim you're
>right and everyone else is wrong. Most people find this really irritating.
>
>Steve
>

Steve,

It's a big world and one thing I've learned about business is you better to
nice to people-- but watch your back.

I've also learned that some individuals will waste precious time at my costly expense. The best thing to do with those people is write them off. History. Life is short and there are billions of other people. Living is an important enterprise so don't waste it .

Accept the fact that I see no reason whatsoever to have anything to do with you.If asked to do so I will respectfully decline and recommend turning you over to someone else.

Please do not correspond with me in any form. If you cannot abide by my wishes then I will take your further statements as harassment, with legal consequences.

Nathan Cohen, Ph.D.

1901. Take the Pledge -- RE-POST!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:19:21 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <BhJv5.1026$Hs2.3250@newsfeed.slurp.net>
Source record: 180869

RE-POST!

Hi, All concerned:

Some of us have organized a self-help group for replying-to-troll addicts. It is a slice of life from the NG, and its occasionally-disregarded motto, pledge, and mantra are identical:

DO NOT RESPOND TO TROLLS*.

Come and join us. It's among the hardest, most-rewarding accomplishments, sorta like a piled-higher-and-deeper from a poison-ivy league school. To join, simply comply with the pledge. We're as close as this NG, and we'd love to have you.

One of the beneficial side-effects of adherence to the Pledge is that of observing the increasing shrillness and irrelevance of the f-word trolls as they attract fewer responses.

I myself was pulled back from the abyss of responding just the other day by a fellow member, who reminded me that one response is too many, and a thousand not enough.

BTW, the private e-mail is deliciously funny. Several members have reported good success with the technique of creating a folder of laughing-and-finger-pointing posts they would have sent publicly before taking the Pledge. They are exchanging files with each other occasionally, and reported results are better than professionally-done comedy.

Fellow members: with apologies to the Brothers Grimm, could we adopt 'Billy Goats Gruff' as our group monicker?

73, Dave, K3BHJ

---

* especially f-word trolls

1902. Re: Is someone selling fractal antennas???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:26:53 UTC
From: fractenna@aol.com
Message-ID: <20000913072653.15743.00000994@ng-cd1.aol.com>
Source record: 180870

>
>>
>>Hmmm, let's see - I put this thing UNDER the battery of my cellphone (it's a
>>PWB on flexible substrate), and it acts like the antenna is 4 feet long.
>>And it's *only* 20 bucks. Haw, Haw...
>>
>>(They must assume that I've already suffered the "brain damage" their RFI
>>"blocker" is supposed to prevent)
>>
>>
>>http://www.makeyourcellphonesafe.com/index2.htm
>
>is this outfit behind the FCC RF safety regulations?
>
>arguments and breakthrough sound very similar to Freaktenna stuff.
>
>my brain is being damaged by garbage like this, TV programs and democrat
>socialist NC, good thing it is all turnable off.
>
>bombard peole with garbage, they will eventually believe it. Keep on bombing
>Chimp!
>
>Hope it helps to find good institution.
>
>bada BUm
>

This has nothing to do with fractal antennas.

NC

1903. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:30:50 UTC
From: 2w8ji@contesting.com
Message-ID: <39bf6493.4809152@news.akorn.net>
Source record: 180871

On 13 Sep 2000 11:18:11 GMT, fractenna@aol.com (Fractenna) wrote:

>Please do not correspond with me in any form. If you cannot abide by my wishes
>then I will take your further statements as harassment, with legal
>consequences.
>
>Nathan Cohen, Ph.D.

Another Fractenna lawsuit?

Nice Troll-job Chip!

73 Tom

1904. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 11:33:44 UTC
From: 2w8ji@contesting.com
Message-ID: <39bf65c6.5116112@news.akorn.net>
Source record: 180872

On 13 Sep 2000 11:11:34 GMT, fractenna@aol.com (Fractenna) wrote:

>
>Would you further agree that, given several recent publicized convictions, that
>those who spread false information about firms on the internet, put themselves
>at severe risk for jail time and major fines?
>
>With best Wishes,
>Chip N1IR

Another lawsuit. That's three now in one thread!

Nice Troll Chip!

73 Tom

1905. Re: dipole: design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 12:01:47 UTC
From: Joe <jmowery@crosslink.net>
Message-ID: <39BF6CAB.390DE2FF@crosslink.net>
Source record: 180873

Build a G5RV or just buy one for around $25.00 US.
Works for me.

Joseph D. Mowery
AG4BW
King George, VA
jmowery@crosslink.net
ag4bw@arrl.net

Franki Van Neyghem wrote:

> To all willing to help me - thanks in andvance...
>
> I'm trying to build an HF station awaiting my HF-licence... Easiest -and
> most important- cheapest antenna is a dipole (ok, a simple wire beats the
> dipole on this criteria, but I settled for the dipole).
>
> A few questions:
>
> 1. For any given band, can I just calculate the total length by dividing the
> wavelength by two? Should I provide extra length or should I cut it shorter?
>
> 2. I suppose when feeding the antenna with 50ohm coax, I'll need a balun.
> Can I just make an 1:1 by winding the (balanced) cable of the dipole on a
> ferrite core and the solder both ends to a pl-connector (one end to the
> center conductor, other to the ground / shield of the coax). And if so, how
> many turns should I make on the core? And should the ratio be other than
> 1:1?
>
> 3. Other than this, will I be needing some extra matching device (coil,
> capacitor, tuner)..?
>
> I am looking forward to your replies. Any additional tips and tricks are
> greatly appreciated too, that goes without saying.
>
> 73's de Franki ON1DRS
>
> http://www.qsl.net/on1drs

--

1906. Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 12:30:24 UTC
From: Joe & Bonita Sanada <bsanada01@snet.net>
Message-ID: <39BF7360.2F61167D@snet.net>
Source record: 180874

Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...

And wanted to know any PROS or CONS on the antenna...

Will it hold an Amplifier 800Watts?

How does its rate with the Windom, or any other slopers

Thanks for your input...

Joe W1JAS Terryville, Connecticut.

1907. MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:08:00 UTC
From: btakacs@nccw.NET
Message-ID: <4.2.0.58.20000913090509.00987ee0@mail.nccw.net>
Source record: 180875

Where does one go to find out the results of antenna shoot outs that you would see here every so often? Some where that you don't have to read all this Fractal BS that has been going on forever.
Bill/K8VP

1908. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:11:35 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pnuekqtq1@iac5.navix.net>
Source record: 180876

Let's see... Cushcraft about a gazillion antennas delivered to users worldwide. Freaktenna - 0.

He even has delusions of grandeur about being a competitor on top of claiming he is a "top antenna designer"

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000912185432.17005.00000144@ng-cf1.aol.com...
> >Don't know what goes on down at Chip's place.
> >
> >Rick K1BQT
> >
>
> You sure don't:-)
>
> NC

1909. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:19:26 UTC
From: k3bu@aol.com
Message-ID: <20000913091926.07453.00000292@ng-fe1.aol.com>
Source record: 180877

>
>Please do not correspond with me in any form. If you cannot abide by my
>wishes
>then I will take your further statements as harassment, with legal
>consequences.
>
>Nathan Cohen, Ph.D.
>
>

Didn't take too long, eh?
You either agree with his garbage trolls or he will sue you.
Another freaky post for my target crapping. Feel better already.

BUm

1910. N.L. Cohen Ph.D. THEIF AND LIER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:20:42 UTC
From: lcs Mixmaster Remailer <mix@anon.lcs.mit.edu>
Message-ID: <20000913132042.30991.qmail@nym.alias.net>
Source record: 180878

N.L. Cohen We have converted all letters from you and will be placing on web for all world to see as you have asked.
We have now received translation of US patent office document and all at Institute have good laugh at your stupid description and wrong application of fractal wave theory, you still not abel to explain theory of fractal antenna how can you when your listen to Misha who not know full information and you physics knowledge is limited and not applicable to fractal wave antenna fields.
You must first learn CORRECT gravitational wave theory not the BS theory that you use and write about in Cornell Astrophysics 85 document which only apply to gravitatonal lens.
We now understand that patent office only give you utility patent, Office must have smart people working They know you still not understand fractal element antennas and correct mathematics.
We have people check your company and see that you transfer to home address from your father8217s location in Florida on 16/08/00 and that you are owner and president.
Institute has sent information to president of Boston University and our advocate in Moscow who will be talking to patent office about theft of Institute Intellectual information.

Boris
I Know Truth

~~~~~~~~~~~~~~~~~~~~
This message was posted via one or more anonymous remailing services.
The original sender is unknown. Any address shown in the From header
is unverified. Problems, Questions, or Abuse? Visit The Orange
Remailers hompage: HTTP://WWW.REMAILER.CJB.NET
~~~~~~~~~~~~~~~~~~~~

1911. Re: N.L.COHEN Ph.D. FRACTAL ANTENNA THEIF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:22:54 UTC
From: k3bu@aol.com
Message-ID: <20000913092254.07453.00000295@ng-fe1.aol.com>
Source record: 180879

>As you asked we are working on bringing up web site that will show all
>letters from you to Institute from 1993 and 1994 we have scanned and
>converted to image format.
>
>Boris

That's where NC et all "discovered" the Fractals?
Veeery interesting!
Molodets Boris!

Yuri

1912. Re: Beta Testers for FRACTopper(TM) Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 13:49:54 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8po0mfrpu1@iac5.navix.net>
Source record: 180880

This is the same bull crap you put out on the 2 meter "Beta Test". Are there no hams in the world capable of testing your antenna!

We saw no results of your last beta test, or even if it was ever done. I think the whole thing is a fraud designed to mislead the ham population.

I will state with out equivocation, that based on your offers that it is my opinion that you, your company, and your associates are only using this as a ploy to advertise on the newsgroups.

I have forwarded to my legal representative the characteristics of my antenna range, my test equipment, and statements from other hams that have used my facility, the capabilities of said range.. It is my intention to file suit for fraud, naming both Dr. Nathan Cohen Ph.D. and Fractal Antenna Systems Inc.

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message
news:20000912205700.28708.00000686@ng-ff1.aol.com...
> We are still looking for testers for the FRACTopper(TM). Although we
received
> over 90 offers, our team, in finishing it's review, felt that the best
benefit
> for hams would be to make iron clad cases. Frankly, none of the queries to
date
> , although very sincere and enthusiastic, outlined a specific description
of
> how measurements would be made.
>
> We are grateful to those who offered to help, but feel that for hams to
REALLY
> be convinced that a higher level of testing should be done. All this is
within
> reach of the average ham, with extant equipment.
>
> At my team's request, I will extend the offer date to October 15.
>
>
> Hope to hear from you!
>
> Best,
> NC

>
> ---
> Hi All--
>
> I am looking for two hams to be beta testers for a new type of antenna
design
> using a fractal device. This is being called a FRACTopper(TM) antenna. The
> antenna will be for 10M and be under 6 feet tall. It is flexible (for the
most
> part) is ultimately portable, and will fit into a small backpack with
ease.
> (The antenna is not a whip of any kind). Takes about a minute to assemble.
No
> ATU needed. It can be configured as a horizontal or vertical radiator and
is
> high in performance.
>
> I am especially interested in reports of two types:
>
> 1) portable, 'cavedweller' (condo or apt); and/or 'outback' use;
>
> 2) A/B comparisons (see, for example, the ham page of
http://www.fractenna.com
> for some A/B description on 2M, or see Cohen, Comm Quart, Summer 1995,
"Fractal
> Antennas Part 1".)
>
> The beta testers will report back their results and then be able to
discuss
> them, if they wish, after a commercial release. The beta testers comments
will
> not be used in any form of advertising or commercial testimonial.
>
> This is not a business solicitation but a free offer to encourage ham
> experimentation with fractal antennas.
>
> If you have an interest and wish to be considered, please e-mail
> chipn1ir@aol.com
> detailing how you would make measurements and contacts which would be
helpful
> to other hams in the assessment. The two who best detail their
approach--and
> have the best ones-- will be notified before Labor day and the antennae
sent
> out in mid to late September.
>
> Please; no spam or flames. If you have questions kindly direct them to
> chipn1ir@aol.com.
>
> 73,

> Chip N1IR
>
>

1913. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 14:13:44 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39BF8B98.A01F3B14@bigfoot.com>
Source record: 180881

btakacs@nccw.NET wrote:
> Where does one go to find out the results of antenna shoot outs that you
> would see here every so often? Some where that you don't have to read all
> this Fractal BS that has been going on forever.
> Bill/K8VP

Here's one from a few years back:
http://people.delphi.com/cecilmoore/shootout.htm

I will publish a summary of the results of all the shootouts
that I know about.
--
http://www.mindspring.com/~w6rca

1914. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 14:24:24 UTC
From: k1bqt@aol.com
Message-ID: <20000913102424.20308.00000333@ng-da1.aol.com>
Source record: 180882

>...those who spread false information about firms on the internet, put themselves
at severe risk for jail time and major fines?<

Chip, I agreed not to challenge you on here and I won't. Moreover, I'd never run your D & B and post it--mainly because it would be exceeding bad form. Sorry if my pun hit a sore spot.

Rick K1BQT

1915. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 14:33:56 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39BF9054.9E30EDC3@wb6hqk.ampr.org>
Source record: 180884

btakacs@nccw.NET wrote:
>
> Where does one go to find out the results of antenna shoot outs that you
> would see here every so often? Some where that you don't have to read all
> this Fractal BS that has been going on forever.
> Bill/K8VP

Just ask:

SANTA BARBARA ANTENNA TRIALS - AUGUST 17, 1997

Here are the results from the 75 meter mobile antenna trials
held near Santa Barbara on August 17 1997. The callsigns and names
are self explainatory. The numbers, typically between 59.0 and 65.0 are
the measured field strength readings in dB. The field strength meter
measured
the horizontal magnetic field component of the radiated signal at a
distance
of approximatly 800 meters and accuratly represents the vertically
polarized
(electric field) groundwave, which is proportional to the low angle
skywave
radiation suitable for working DX. The measurements do not necessarily
reflect the performance of the antenna system for working short skip
(NVIS)
but are generally a useful indicator of overall performance. In most
cases, the measurements were done at 3995 kHz but we allowed the
frequency
to be lowered if required to achieve adequate power transfer. The power
input to the antenna system was taken as the difference between forward
and reflected power as measured with a Bird wattmeter anywhere the
operator could provide feedline access, usually at the rig antenna
connector.
The forward power was typically between 40 and 50 watts and all readings
have
been normalized. The absolute value of the field strength measurements
have
no meaning whatsoever but the differences accuratly reflect antenna
system
differences. Note, for 75 meter mobile installations, the vehicle is a
major
part of the antenna system and the data reflects entire antenna system
performance. In some cases, extensive bonding of body and frame members
has
been done to reduce losses and improve counterpoise effectiveness.

Unless
stated, all vehicles were legal to drive with in the state of California
with
the antenna systems deployed and presumably operable. When the field
strength
trial began at around 0800, there was a slight drizzle which tended to
detune (down frequency) the open air bugcatcher coils by around 20 kHz.
The
earlier measurements made with the bugcatchers tended to be a couple of
tenths of a dB below the later measurements and I believe that to be as
a
result of water on the coil and not a shift in antenna range
calibration. In
the past we have found the same equipment to be repeatable to within +-
0.15 dB
or better. The comparisons can be expected to be accurate to +- 0.2 dB.

RESULTS

CAPACITY HATS: These antennas had capacity hats of some sort for top
loading.

K7POF - BOB 64.8 (lST RUN) 65.1 (2ND RUN LATER IN THE DAY)
W6MMA - VERN 64.9
W6RCA - CECIL 64.9
N6BT - TOM 63.8 (lST RUN) 64.8 (2ND RUN) 66.0 REAR ASPECT
K6SDQ - JIM 63.2
KE6DM - BOB 63.0
K6MB - JAY 59.2

BUGCATCHER TYPE: Whip only, no top hat.

K7POF - BOB 63.2
WA6JPR - WALLY 62.3
WB6HQK - BART 61.7
K6MB - JAY 60.4
W6RCA - CECIL 58.3
W6JEO - CARL 57.7
W5GYJ - JIM 57.2
KC6MAJ - PETER 52.7
WB6ZJA - JIM 51.9
SCREWDRIVER TYPE: Various manufacturers

KE6ELQ - FRANK 64.3 DOES NOT MEET VEHICLE CODE - 20' TIP TO GROUND.
W6MMA - VERN 63.2
K6RCL - DENNIS 62.6
WA6HEY - JAKE 62.1
K7EZ - ROGER 61.9
KA6TAY - GREG 61.8

OTHER:
W6YY -SANFORD 66.7 DOES NOT MEET VEHICLE CODE - 30ft ANT, TOP OF

MOTORHOME
WA6JPR - WALLY 61.1 BANDHOPPER
WA6JPR - WALLY 59.5 BANDSPANNER
WA6JPR - WALLY 58.3 STAINLESS STEEL FORTEX COIL
KK5YY - GERALD 56.4 ROOFTOP MOUNTED OUTBACKER WITH TRIPLE MAGNET
MOUNT
W6RCA - CECIL 52.2 11.5' WHIP (NO COIL)

ADDITIONAL DETAILS:

CAPACITY HATS:

K7POF - CENTER-LOADED, LARGE CAPACITY HAT, WIRES TO FRONT.
W6MMA - BBS SCREWDRIVER, 5' HAT WITH 18 RADIALS, R. FRONT BUMPER.
W6RCA - HOMEBREW MID-BACK BUMPER, OVER THE VEHICLE,TOWARD FRONT. 4:1
UNUN
N6BT - FORCE TWELVE PLUMBER'S DELIGHT ALL AROUND VEHICLE.
K6SDQ - CENTER-LOADED WITH 42" HAT @ 11 ABOVE COIL. LEFT REAR.
KE6DM - CENTER-LOADED MID-BACK BUMPER 17" HAT.
K6MB - LEFT, REAR MOUNT, CENTER-LOADED WITH TWO WIRES TOWARD FRONT.

BUGCATCHER:

K7POF - MASTER MOBILE, LEFT REAR, 7011 BASE, 64" WHIP.
WA6JPR - BUGCATCHER, MID-BACK BUMPER MOUNT. (NO PAPERWORK)
WB6HQK - 5.25 INCH DIA COIL ON 2.5 FOOT MAST MOUNTED ON TONNEAU COVER,
72 WHIP
K6MB - BUGCATCHER, LEFT REAR.
W6RCA - TRAILER HITCH MOUNT, 3' BASE, 6X6" COIL, 5' TOP.
W6JEO - BASE-LOADED, 2x12" COIL, 62.511 TOP, 3.5' GND TO BASE.
W5GYJ - BASE-LOADED, 8x12" COIL, 7' TOP, 3' GND TO BASE. (GLA COIL)
KC6MAJ - CENTER-LOADED, ON TRUNK, 3X5" COIL. (HUSTLER COIL)
WB6ZJA - TEXAS B.C. LEFT ABAFT CAB MOUNT, 16"-HAT 12" ABOVE COIL.

SCREWDRIVER:

W6MMA - AS ABOVE SANS HAT.
K6RCL - HIGH SIERRA 1000, CNTR-LEFT MOUNT, GMC P.U.
WA6HEY - W6AAQ ANT., REAR, LEFT MOUNT @ 43" GND TO BASE.
K7EZ - W6AAG ANT., REAR MOUNT, 36" GND TO BASE.
KA6TAY - HIGH SIERRA, CNTR REAR BUMPER MOUNT 16" GND TO BASE.

OTHER:

WA6JPR - BANDHOPPER.
WA6JPR - BANDSPANNER.
WA6JPR - STAINLESS STEEL.
KK5YY - OUTBACKER,CNTR-ROOF, MAG-MOUNT.
W6RCA - 11.5' WHIP (NO COIL) TRAILER HITCH MOUNT.

Additional Notes:

KC6MAJ and WB6ZJA apparantly had grounding problems and the results are
not typical of similar installations.

These are the final results but updates may occur as additional
information
becomes available. If you have any additional information or errors to
report, please let me know.

If you have any questions please feel free to email me:
bart@wb6hqk.ampr.org

bart
wb6hqk

1916. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 14:39:27 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39BF919E.6251FF68@fgi.net>
Source record: 180883

Very interesting coverage Roy that was educational
of itself

I have no business intruding in such a
complicated matter but wouldn't there be a large
area on the ground where the signal angle is a variable?
Or does it really" bounce" to an instant change in trajectory.
Somehow my gut tells me that as the frequency is lowered
more features come into play than in say 10 metres with
respect to wave travel contours. We all tend to extrapolate
beyond observed boundaries and maybe this is one of those cases
It also comes to mind the use of low frequencies
by the military in "unfreindly environments" such
as under water e.t.c.where temperature comes into the picture
which is not of consequence in HF. frequencies but comes also
into play with VHF
But as Sergeant Shultz would say
" I know nothing, nothing"
Regards
Art Unwin KB9MZ

Roy Lewallen wrote:

> "Ed Hare, W1RFI" wrote:
> >
> > . . .
> > Still at a loss, here, Tom, but I am no expert on all this. The models all
> > say what got you to build the antenna in the first place. Maybe Roy can
> > offer any modeling insight, unless he has been through this with you here
> > before.
>
> I've discussed this with Tom on a number of occasions, and haven't found
> an answer. I'm inclined to think that the problem is one of the
> following:
>
> 1. There's something about the ground that the homogeneous ground model
> doesn't represent well. For example, if there's a high water table, is
> there a homogeneous ground with a single ground conductivity that can be
> put into the model to get accurate results? If so, what conductivity
> should be used? If not, the programs simply can't represent the real
> situation.
>
> 2. There's something fundamental about the ground modeling routines
> that's in error, making the modeling results more or less invalid
> whenever a ground is included in the model.

>
> 3. Arrival angles are very different from what they're assumed to be.
>
> Other possibilities I've pretty much discarded are:
>
> 1. Tom's observations are in error, or there's something unusual about
> his antennas or their environment (other than ground) he's not aware of.
>
> 2. There's something else besides the ground representation that the
> programs aren't doing well.
>
> NEC-2 has been pretty thoroughly rung out with respect to free space
> analysis. Simple antennas can be mathematically modeled quite easily,
> and NEC-2 results agree very closely with results from mathematical
> modeling. So I don't think there's anything fundamental about the
> programs that's to blame for the disagreement. Models including ground
> have been tested a whole lot less, though. One paper I've seen where
> real antennas were measured and compared to NEC-2 results showed quite a
> lot of variation between the model and measurements, particularly at
> lower frequencies. The differences were highly variable, so no trend was
> apparent. One of the paper's authors explained that really good
> measurements are extremely difficult, so it's impossible to say whether
> the errors are in the program, the measurements, or both. Tom has also
> seen what he feels is disagreement between actual and modeled
> performance of elevated radial systems. On the one hand, this might
> indicate a fundamental problem with the modeling program. On the other,
> it might be further evidence of some sort of unusual ground condition
> that's either being modeled incorrectly, or can't be modeled correctly.
> Once again, good measurements are difficult, and methodology can always
> be questioned. I've been trying to set up a time that's mutually
> convenient when we can get together, with some good test equipment, and
> make some really careful, objective tests of an elevated vs buried
> ground system, but haven't managed it yet.
>
> Incidentally, NEC-4 produces virtually identical results for this sort
> of setup unless buried radials are explicitly included, since it's
> possible to include buried radials in the NEC-4 model but not in NEC-2.
> So this discussion applies equally well to NEC-4.
>
> In the meantime, I certainly accept Tom's observations at face value,
> and am convinced that the model (including arrival angle), at least as
> it's been constructed, doesn't agree with observations. I do think that
> propagation should remain in the discussion, since arrival angle
> assumptions have a major effect on results. And there are still a lot of
> propagation-related phenomena that aren't well understood, or at least
> widely known.
>
> Roy Lewallen, W7EL

1917. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 14:58:22 UTC
From: 2w8ji@contesting.com
Message-ID: <39bf958a.17346837@news.akorn.net>
Source record: 180885

On Wed, 13 Sep 2000 08:30:24 -0400, Joe & Bonita Sanada
<bsanada01@snet.net> wrote:

>Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...
>
>And wanted to know any PROS or CONS on the antenna...
>
>Will it hold an Amplifier 800Watts?
>
>How does its rate with the Windom, or any other slopers
>
>Thanks for your input...
>
>Joe W1JAS Terryville, Connecticut.

Hi Joe,

A double bazooka is no different than any other dipole. There is a lot
of misleading hype about that antenna.

Save your money, and put up a regular dipole.

73 Tom

1918. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 15:17:56 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8po5riqv1@iac5.navix.net>
Source record: 180886

Another interesting point, how can one have a 10-80 meter bazooka? The
bazooka's claim to fame was that it was comprised of 1/2 wave length in coax
coupled to 1/2 wavelength in wire. Supposedly the impedance was corrected by
this setup to allow a wide bandwidth. I, like yourself, have never found
this to be true in practice.
But! a claim of 10-80 makes no sense what so ever.

On 75/80 I use a 12" diameter cage dipole. It is the best setup I have
found that is practical to install.

--

Fred W4JLE
http://w4jle.com/

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39bf958a.17346837@news.akorn.net...
> On Wed, 13 Sep 2000 08:30:24 -0400, Joe & Bonita Sanada
> <bsanada01@snet.net> wrote:
>
> >Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...
> >
> >And wanted to know any PROS or CONS on the antenna...
> >
> >Will it hold an Amplifier 800Watts?
> >
> >How does its rate with the Windom, or any other slopers
> >
> >Thanks for your input...
> >
> >Joe W1JAS Terryville, Connecticut.
>
> Hi Joe,
>
> A double bazooka is no different than any other dipole. There is a lot
> of misleading hype about that antenna.
>
> Save your money, and put up a regular dipole.
>
> 73 Tom

1919. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 15:26:26 UTC
From: hamke4wy@aol.com
Message-ID: <20000913112626.29055.00002253@ng-cg1.aol.com>
Source record: 180887

Joe, also the double bazooka is a single band antenna...no 10-80 coverage.

73 de KE4WY Jim
>Subject: Re: Comments: Double Bazooka Dipoles
>From: 2w8ji@contesting.com (Tom W8JI)
>Date: 9/13/00 10:58 AM Eastern Daylight Time
>Message-id: <39bf958a.17346837@news.akorn.net>
>
>On Wed, 13 Sep 2000 08:30:24 -0400, Joe & Bonita Sanada
><bsanada01@snet.net> wrote:
>
>>Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...
>>
>>And wanted to know any PROS or CONS on the antenna...
>>
>>Will it hold an Amplifier 800Watts?
>>
>>How does its rate with the Windom, or any other slopers
>>
>>Thanks for your input...
>>
>>Joe W1JAS Terryville, Connecticut.
>
>Hi Joe,
>
>A double bazooka is no different than any other dipole. There is a lot
>of misleading hype about that antenna.
>
>Save your money, and put up a regular dipole.
>
>73 Tom
>
>
>
>
>
>

1920. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 15:48:37 UTC
From: cdean@firstcitizensbank.com
Message-ID: <39bfa32d.100141337@news.epix.net>
Source record: 180888

A dipole is open ended a Double Bazooka is DC grounded thru itself taking away a lot of noise. Also you have a LOT more bandwidth than a dipole so you wont need to use a tuner as often. I dont like the weight issue though. They are a lot heavier. I will stick to my double bazooka. I would make one versus buying one though.

On Wed, 13 Sep 2000 14:58:22 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>On Wed, 13 Sep 2000 08:30:24 -0400, Joe & Bonita Sanada
><bsanada01@snet.net> wrote:
>
>>Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...
>>
>>And wanted to know any PROS or CONS on the antenna...
>>
>>Will it hold an Amplifier 800Watts?
>>
>>How does its rate with the Windom, or any other slopers
>>
>>Thanks for your input...
>>
>>Joe W1JAS Terryville, Connecticut.
>
>Hi Joe,
>
>A double bazooka is no different than any other dipole. There is a lot
>of misleading hype about that antenna.
>
>Save your money, and put up a regular dipole.
>
>73 Tom

1921. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 15:49:40 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39BFA214.8C9D673B@bigfoot.com>
Source record: 180889

CAM wrote:
> I will publish a summary of the results of all the shootouts
> that I know about.

Here's the promised summary based on three 75m shootouts.
These are relative average estimates without absolute accuracy.
(In fixed font)

Good Screwdriver or Bugcatcher with good top hat 0 dB
Good Screwdriver or Bugcatcher without top hat -2 dB
Base Loaded Whip, Bugcatcher coil -5 dB
Hustler -8 dB
Outbacker -9 dB
Hamstick -12 dB
138 inch whip with SGC-230 -13 dB

Assuming the 0 dB mobile antenna is radiating ten watts,
the 75m Hamstick would be radiating less than one watt using
the same transceiver.
--
http://www.mindspring.com/~w6rca

1922. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 16:16:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39BFA86F.4255@wt.net>
Source record: 180890

Corey Dean wrote:
>
> A dipole is open ended a Double Bazooka is DC grounded thru itself
> taking away a lot of noise. Also you have a LOT more bandwidth than a
> dipole so you wont need to use a tuner as often. I dont like the
> weight issue though. They are a lot heavier. I will stick to my
> double bazooka. I would make one versus buying one though.

The is a catch though. The wider bandwidth is due to loss in the coax. A regular wire dipole will have a slightly higher performance. MK
--
http://web.wt.net/~nm5k

1923. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 16:25:04 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39BF9D30.9E0F3E66@GTE.net>
Source record: 180891

Joe & Bonita Sanada wrote:

> Hi I am looking to Buy a 10-80 meter Double Bazooka Dipole antenna...
>
> And wanted to know any PROS or CONS on the antenna...
>
> Will it hold an Amplifier 800Watts?
>
> How does its rate with the Windom, or any other slopers
>
> Thanks for your input...
>
> Joe W1JAS Terryville, Connecticut.

Unless I am missing something, the double bazooka is a mono band antenna-
at least when functioning as a broad band dipole. Even the benefits of the
broad VSWR response are somewhat in doubt as it appears the increased BW
is a result of loss in the coax matching sections. Any comments?

Dale W4OP

1924. Re: Stealth antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 16:38:11 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <s5avrsgntuib52apk6lcdaui5vr4if843q@4ax.com>
Source record: 180892

On Tue, 12 Sep 2000 20:24:40 -0700, "JerryL" <jlockett@lightspeed.net>
wrote:

>Ok guys, what about this 'stealth' antenna. Is this a scam or is there any
>validity to it?
>
>www.c2i2.com/~lasono/dovetron/main.shtml
>
>de Jerry -w7wpx-
>

I'd be very careful with this one. The laws of physics say that if RF
energy is to radiate, it must flow through a conductor of some kind.
You can not just bottle it up at a single point and expect radiation.
It is possible that this device causes the RF to flow mainly through
the cable connecting it to the rig, or perhaps a separate ground wire
or some combination thereof. I wouldn't send any money until it has
been reviewed by several independent hams.

73, Bill W7TI

1925. Re: Help to build a dish of 4M//moonbounce needs 16KW!!??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 16:38:12 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <9gavrsgu6qkc32shi5i3iuu0nvapovpv5a@4ax.com>
Source record: 180893

On Wed, 13 Sep 2000 03:07:29 GMT, n7ws_nospam@arrl.net (Wes Stewart)
wrote:

>>i dont share that pessimissim!!--check out w5UNs page..you can work
>>him (on 2 mtrs) with a good single yagi and about a 160 watt amp!!

I would love to hear a recording of an EME QSO, or even just tests.
Does anyone know of a .wav file available on the web?

73, Bill W7TI

1926. Log Priodic (V)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-13 16:48:11 UTC
From: cajo1@my-deja.com
Message-ID: <8pob42$41$1@nnrp1.deja.com>
Source record: 180894

Have anyone buildt the Telerana or the V array.

for 10-30Mhz.How was the result? Any suggestions for better

broadband antennas?

BEST REGARDS from CAY in SWEDEN.

Sent via Deja.com http://www.deja.com/
Before you buy.

1927. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pr8ld$5eb$1@neptunium.btinternet.com>
Source record: 180719

Neglecting propagation effects, with un-insulated wire there is just a simple resistance between the wire and mother Earth.

When the wire is insulated there is a very slightly smaller resistance in series with a capacitance.

The capacitance is that between a pair of coaxial conductors. Inner conductor diameter is that of the wire. Outer conductor diameter is that over the insulation. The dielectric constant is that of the insulant. Pvc has a considerably greater dc than polyethylene.

The capacitance of 14 awg wire insulated with pvc of thickness = 1 wire diameter, is about 80 pF per foot or about 270 pF metre.

The capacitance per foot of enamel-insulated magnet wire is much greater. Forget it at HF.

So the equivalent input impedance of a set of buried, insulated, radials is that of a large capacitor in series with a resistance.

When a vertical antenna is mounted above such a radial system a bottom-end loading coil is needed to tune-out the capacitative reactance. In practice it just needs a few more turns on a loading coil, needed in any case, to resonate a short antenna. Or it disappears into the tuner and the operator is unaware of its existence.

Radial wires also have inductance which usually results in the input impedance of a buried un-insulated radial system having a +ve reactance. Unknown to the operator, the tuner then supplies an effective series capacitance to tune it out.

And the foregoing partly explains why operators having nominally identical antenna + ground radial systems have different degrees of success in getting then tuned up on all bands.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

<bkizerian@my-deja.com> wrote in message
news:8poibu$9h5$1@nnrp1.deja.com...
> No doubt this question has be discussed before, but I sure
could use
> the wisdom and experience of others.
>
> My question: What type of wire is best for buried radials?
I want to
> use something that will hold up for many years, if
possible. Is
> insulated wire okay? Seems to me it would deteriorate less
than bare
> wire.
>
> Thanks
>
> Bruce Kizerian
> kk7zz
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

1928. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c11f92.34057355@news.akorn.net>
Source record: 180720

On 14 Sep 2000 11:59:01 GMT, fractenna@aol.com (Fractenna) wrote:

>You certainly can make a beverage. however, you'll need to keep the antenna as
>straight as you can for best f/b . An inch or two droop isn't a problem for a
>beverage, say, 10 feet off the ground. But a 3 or 4 foot droop is. Also, the
>performance will very much depend on the uniformity of the ground.
>GL!
>73
>Chip N1IR

Hi Terry,

You're low longwire could be considered a Beverage antenna.

The information above is incorrect Terry. I have almost 30 Beverages
here, and they make fine receiving antennas. There is very little
difference in Beverage performance if you have belly in the spans.

Here are some general guidelines:

1.) Keep the antenna reasonably straight and pointed in the direction
you want to receive. A few degrees (say under fifteen degrees) of
pathg deviation won't hurt as long as the antenna is generally
centered on the direction you want to receive.

2.) At about 1-1/2 or 2 wavelengths, the directivity stops increasing.
That's because ground losses below the antenna sap energy from the
wire.

3.) Keep the Beverage low. The Beverage must be under about .02 WL
high or you will start to loose directivity.

At higher heights, the Beverage acts more like a long wire. You can
use longer lengths of wire effectively.

Like Doc, I think your wire is too small.

You may not care about any of this, and just want to reel out your
wire. Have fun.

If you are serious about receiving weak signals, I suggest you do a
Web search on Beverages or look at a copy of Low Band DXing by ON4UN.

73 Tom

1929. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39c11dcd.6088908@news.mcn.org>
Source record: 180721

On Thu, 14 Sep 2000 11:38:16 -0500, sideband@mindspring.com wrote:

>
>
>Dan Richardson wrote:
>
>> Yes, and tree climbing spikes are of different length depending upon
>> the type of tree. For example spikes used on redwood trees are much
>> longer than those use when climbing fir trees.
>>
>>
>
>I have never seen or used any spikes except pole spikes but that seems backwards
>to me. Wouldn't you want longer spikes on softer wood for more stability? Does
>this make sense?

Short spikes won't hack it on a redwood. The bark is fairly thick and
very soft. You need to penetrate that well or you're in for a very
unpleasant experience... Hi.

Danny

1930. Re: 10 mtr antenna... Houston, we have a problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C12CEC.5CE28193@oltraining.com>
Source record: 180722

Wayne, a rear deck clamp on antenna mount and a ham stick for ten meters would do the trick. The antenna you describe sounds like many I see mounted on 18 wheel trucks. I think it is designed to be co-phased. By son, KB5EAG, uses a set on 11 meters from his 18 wheel truck (He is an owner operator.), but has had no trouble using a switch and two coax feeds. He switches between the two antennas to gain directivity.

The only reason for the shortened antenna is because if they were any taller - they would be too tall for the highway when mounted on the side mirrors of the big trucks.

Again, I recommend the trunk lid clamp on mounts. They work great on the rear door of a van and can handle a full sized mobile amateur whip.

Terry - W6LMJ

Wayne Grauel wrote:

> OK Folks... here it goes. I have a 96 Suburban that I want to mount an
> antenna for 10 meters (without drilling holes in my vehicle). I
> currently made a mount from steel that comes out from under the rear
> bumper/drivers side (so doors will open). This antenna was a ham fest
> acquisition and the notation said it was very broad banded for 10 & 11
> meters. it's shiny, has two big coils (like springs, not wound coils)
> and is about 5 feet tall or so and aparently isn't worth a hoot!. I
> have no directions. When mounted it sticks up past the roof about 1.5
> maybe 2 feet. I took my TS440SAT out and placed it on the fron seat
> (coax is in the vehicle, not running outside).
> SWR's were through the roof. The vehicle was sitting beside the house
> in the driveway.
>
> I have a hunch this is a glorified CB antenna. The AT would tune it but
> not above 29 MHZ. I'd kinda like to have an antenna that will tune to a
> reasonable SWR so I can use my little IC706 (no tuner) .
>
> Well everyone, did I give you enough info to point me in the right
> direction, do I start cutting wire off the antenna (whip is adjustable),
> or do I shit-can it and find a ham stick.
> It is adjustable to about 4 inches before it bottoms out.
>
> Inclusion.... here's a thought, does anyone think that by removing one
> of the sets of "springs" this would place it in the 10 meter band????
> I'm assuming a 10 meter antenna will be shorter than an 11 meter
> antenna...no?
>
> Back to original post....

>
> I'm just not sure which way to go or what is the culprit.
>
> I'd really like to stay with a bumber mount of some kind and not have
> some huge mast on top of the roof, etc.
>
> TNX
> Wayne
> N3TNS

--

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1931. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C12DCC.A8C36EEB@oltraining.com>
Source record: 180723

Bill, not sure about the "couple of lengths of conduit on the ground and pulled up next to the pole with a rope
or cable ?" part of your idea. But I have seen plenty of telephone poles used to support a triband beam. I would suggest something more substantial then simple conduit.

Terry - W6LMJ

Bill wrote:

> Hi All,
> I have a telephone pole that is approximately 45ft high. I am planning on
> putting up a 10-15-20 tribander with a 18ft boom and a rotor.
>
> Has anyone seen an antenna and rotor like this mounted on top of a couple of
> lengths of conduit on the ground and pulled up next to the pole with a rope
> or cable ? Seems to me it could be done, but would like some feedback from
> anyone who may have tried to help find glitches in it before I try it (or
> not).
>
> Thanks,
> Bill

--

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1932. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <w7aw5.653$u95.1947359@news.ntplx.net>
Source record: 180724

Martin Meserve <meserve@my-deja.com> wrote:

> >> SWR = (Vf + Vr) / (Vf - Vr)

> however, it's not going to be that simple. Just having
> the forward and reverse voltages is not enough information
> to intellegently control a transmission line tuner. Without
> phase information you won't be able to tell if you need
> more/less C or L. If your program was going to be strictly
> an itterative operation it could be done with minumum
> information, but it wouldn't be very elegant.
> What you are doing sounds like a fun project, however, I
> think you need to grab a book on transmission lines and
> antennas and give it a good read. Get a copy of the ARRL
> Antenna Handbook. It has a lot of good chapters on transmission
> lines, tuners, and antennas. It will give you a lot of insight
> into your development.

See also http://www.arrl.org/tis/info/reflections.html. This page contains reprints of a number of articles related to SWR.

73,
Ed Hare, W1RFI

1933. Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C1301E.2AE4DE39@oltraining.com>
Source record: 180725

http://www.x10.com/products/x10_vk45a.htm sells a 2.4 GHz camera and receiver for less then a $100 bucks. I have one in my office at http://www.olt.net/webcam/

The produce good color images and also include an audio channel.

Here is an excerpt from their web site.

XCam2 is a Tiny Wireless 2.4GHz Super Sharp COLOR Video Camera that lets you view ALL the action!

* Instant LIVE audio and video
* Works Right Out of the Box
* Sets Up in Minutes (hassle-free)
* Hands-free operation
* 2.4GHz transmitter (clear, sharp)

The setup includes both the wireless camera and the receiver. The receiver outputs RF and RCA feeds.

Terry - W6LMJ

"g0nmy@callnetuk_dot_com" wrote:

> "FxBxIsnoop" <fxbxisnoop@aol.com> wrote in message
> news:20000830223223.06354.00000699@ng-fx1.aol.com...
> > We are a law enforcement agency with an antenna problem. I need
> information
> > from anybody who uses a 2.4 Ghz video transmitter/receiver system. The
> system
> > we have uses a small 1 watt transmitter with a vendor-supplied rubber duck
> > antenna approximately 4 inches in length with an SMA connector. Due to
> > concealment requirements it is not possible to use a directional antenna
> on the
> > transmitter. To overcome a dead spot I need a directional antenna for the
> > receiver, which currently has a vendor-supplied rubber duck antenna
> > approximately 4 inches in length with an SMA connector. Which directional
> > antennas have you guys had the best results with in the 2.4 Ghz band? If
> anyone
> > has constructed a good homemade antenna, especially something along the
> lines
> > of a parabolic reflector I would be interested in seeing your
> plan/schematic.
> > The area where I need coverage is a couple hundred feet beyond where the
> signal
> > drops out. Thanks.
>

> Well I would not consider 1W a small signal at 2.4GHz, however,
> any form of parabolic dish could be used at this freq with a dipole mounted
> at the focal point.
> a dipole of around 3" could be used you would have to find the focal point
> of the dish.
> f = D^2/16c
> so the focal point of the dish is equal to the Diameter of the dish squared
> divided by 16 times the depth of the dish at the centre.
> so a 1ft diameter dish with a depth of 2 inches at the centre would give
> 144/16x2 = 4.5 so the focal point would be 4.5"
> remember that this is the focal POINT so you would have to bring your dipole
> in towards the dish.
> this would give you a fair amount of gain and if you fit a pre-amp would
> really hot things up.
>
> From what other comments have been made to your request some seem a little
> negative, which does not supprise me with today's radio hams.
> As far as I am concerned by increasing the sensitivity of the receive side
> would not break any licence only if you increased the transmit side which
> could cause interference to other band users.
> However, I do not live in the U.S. so do not know your laws too well, but
> using common sense I cannot see a problem with what you are asking.
>
> And besides if it helps to catch criminals there that's great by me.
> hope this helps a little.
> cheers Mark
> G0NMY

--

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1934. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C131A4.D345A00F@oltraining.com>
Source record: 180726

Thus providing some support for the notion that a formal education
decreases one's ability to think.

Terry - W6LMJ

Peter Bertini wrote:

> The following short quiz consists of 4 questions and tells whether you
> are qualified to be a "professional." Scroll down for each answer.
>
> 1. How do you put a giraffe into a refrigerator?
>
> The correct answer is:
>
> Open the refrigerator, put in the giraffe and close the door.
>
> This question tests whether you tend to do simple things in an overly
> complicated way.
>
> 2. How do you put an elephant into a refrigerator?
>
> Wrong Answer: Open the refrigerator, put in the elephant and close the
> refrigerator.
>
> Correct Answer: Open the refrigerator, take out the giraffe, put in the
> elephant and close the door.
>
> This tests your ability to think through the repercussions of your
> actions.
>
> 3. The Lion King is hosting an animal conference. All the animals attend
>
> except one. Which animal does not attend?
>
> Correct Answer: The Elephant. The Elephant is in the refrigerator.
>
> This tests your memory.
>
> OK, even if you did not answer the first three questions correctly, you
> still have one more chance to show your abilities.
>
> 4. There is a river you must cross. But it is inhabited by crocodiles.
> How
> do you manage it?
>

> Correct Answer: You swim across. All the crocodiles are attending the
> Animal Meeting.
>
> This tests whether you learn quickly from your mistakes.
>
> According to Andersen Consulting Worldwide, around 90% of the
> scientists they tested got all questions wrong. But many
> preschoolers got several correct answers.

--

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1935. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C1304B.D0D1391@mindspring.com>
Source record: 180727

Ok. My theory was good but my knowledge of trees sucks. I thought redwood was hard and dense and fir was soft. Maybe I was thinking of fur. :-)

Roy Lewallen wrote:

> Makes sense to me. Redwood is very soft. Douglas fir, which I understand
> isn't really a true fir, is much harder and more dense. I don't know
> about true firs like Grand or White fir, but I'd be pretty sure they're
> harder than redwood, too.
>
> Roy Lewallen, W7EL
>
> sideband@mindspring.com wrote:
> >
> > Dan Richardson wrote:
> >
> > > Yes, and tree climbing spikes are of different length depending upon
> > > the type of tree. For example spikes used on redwood trees are much
> > > longer than those use when climbing fir trees.
> > >
> > >
> >
> > I have never seen or used any spikes except pole spikes but that seems backwards
> > to me. Wouldn't you want longer spikes on softer wood for more stability? Does
> > this make sense?

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to use a
spell checker and don't take criticism well.

1936. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d02f17.101756868@news.seanet.com>
Source record: 180728

On Thu, 14 Sep 2000 11:41:53 -0700, "Robert Fanfant"
<fanfant@ix.netcom.com> wrote:

>
>What would really be nice is if someone has a flow chart (i.e. steps) for
>tuning a Pi network given the SWR and phase (i.e. whose output state is to
>either Increase/decrease L or C, OR its a perfect match).
>
>-rob

Hi Rob,

This is exactly the logical problem that I describe as getting caught in a local minima. The problem is you have so much control, that you could easily(or difficultly) find several solutions. The common first step is set the caps fully meshed and the inductance at its least value. The common second step eludes me (aside from the obvious fumbling to lower SWR). This also says nothing of tuning up first into a dummy load - I will skip that as not part of the game plan. Successive steps would undoubtedly resolve to a finer solution. However this does not guarantee the best solution.

The kicker to this call for a flow chart is that the program, to find the best solution, has to perform either a look-ahead or a look-behind well beyond the current settings to determine if another solution is available (much less better). Programming software in this category is sometimes called self-modifying or possibly as genetic algorithms. In other words, not a path to follow for the weak of heart. Why? because such programming can lead to logical nightmares for implementation and unstable operation.

This returns us to the possibility that the first solution will be the practical solution, and I am sure there are those with more time at the tuner that can give you a more reliable sequence of control setting than my feeble attempt above.

73's
Richard Clark, KB7QHC

1937. Re: Improving 900Mhz reception

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C132D9.941C4CC1@oltraining.com>
Source record: 180729

Interesting question. Can you use an additional, larger, parabolic dish to provide higher gain and capture area - pointing your smaller dish into the larger dish, thus achieving some level of gain?

Just a thought.

Terry - W6LMJ

Jenni wrote:

> Hi all,
>
> I have a wireless(portable) data terminal operation in the 900Mhz range.
> It's operating indoors. In the location where I would like to place it,
> I can't get any reception. I can, however, if I move it to a different
> location or take it outdoors. So I'm assuming the area is somewhat
> shielded. I spoke with the wireless data service provider and they said
> that a 3db high gain 900mhz antenna could help me improve reception.
> However, they were not very helpful in explaining how to connect it or
> where to get it . In addition the terminal has no connections for an
> external antenna and the unit is sealed. If I break the seal to open it
> and monkey with the stock antenna, I am liable for damages with the
> company I lease it from. So my questions to the group are:
>
> Does anyone know a way to connect an auxiliary antenna to the existing
> antenna so I can run it to an area with better reception? or perhaps a
> way to passively improve the signal?
>
> Where can I find a 3db high gain 900mhz antenna? (Radio shack wasn't
> very helpful and there is too much info to digest on the web)?
>
> Am I going about this correctly or can someone suggest a better approach
> (i.e. repeater? amplifier?)?
>
> Thanks in advance for the response and sorry for the long post but I
> wanted to get out all the details.
>
> -Jen
>
> /* To respond remove the "nonforme" node from my email address */

--

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1938. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <nu92ssgn1u1qfj3rqop98dq0q8pid4dqeh@4ax.com>
Source record: 180730

On Sun, 10 Sep 2000 05:58:42 GMT, n7ws_nospam@arrl.net (Wes Stewart)
wrote:

>
>The downside to this is that it's hard to keep the scorpions from squeezing by
>the cables.

That's why I drilled a 4'' hole as with a 4'' hole you can get your
hand down the pipe and pack it tightly with Rock wool (or Glass fibre
of rags)
I also have room for a fair few runs of coax
It did annoy the wife but they get over this sort of thing Eventually

73's De Brendan Minish EI6IZ
--
Brendan Minish
The reply address works but
This will get to me faster
bminish at eircom dot net

1939. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d23329.102798206@news.seanet.com>
Source record: 180731

On Thu, 14 Sep 2000 20:15:16 GMT, "Terrence R. Redding, Ph.D."
<terry@oltraining.com> wrote:

>Thus providing some support for the notion that a formal education
>decreases one's ability to think.
>
>Terry - W6LMJ
>
>Peter Bertini wrote:
>
>> The following short quiz consists of 4 questions and tells whether you
>> are qualified to be a "professional." Scroll down for each answer.
>>
>> 1. How do you put a giraffe into a refrigerator?
>>

Hi Terry,

Or as a friend describes: "all your common sense has been educated out
of you."

73's
Richard Clark, KB7QHC

1940. Re: Stealth antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C137EE.51E14748@oltraining.com>
Source record: 180732

WA6INF (now W7SK) used a slinky dipole in his house to serve as the slow speed CW net manager on 40 meters in Oklahoma in 1974. I haven't seen one since. But it struck me as an ideal indoor wire antenna. The tuning for multiple bands was done with wire and alligator clips to short out portions of the slinky dipole.

Terry - W6LMJ

K4JDP@webtv.net wrote:

> I'm currently using a G5RV-Jr. looped around the bedroom ceiling,
> running 100 watts and less with a TS-830S and a tuner.
>
> Any better ideas for an apt. antenna at a complex that prohibits outside
> antennas? I've looked at Outbackers (all band whips) but I still
> enjoying eating food and the other necessities of life that the money
> could better be used for!
>
> No I'm not moving out, my wife and I like it here a lot. (1 block from
> the beach.)
>
> Sincerely,
> John

--

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1941. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C1390C.11A422DB@oltraining.com>
Source record: 180733

I just worked my first fractal antenna - a ham in Portland, Oregon.
Until today I had never heard of one.

Terry - W6LMJ

Fractenna wrote:

> Fun!
>
> Just worked country 310 on 10M with the 10M fractal quad yagi (see:
>
> http://www.fractenna.com/ham/hampage1.html
>
> 8Q7XX, first call!
>
> 73,
> Chip N1IR

--

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1942. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C13F21.BA58A661@eznec.com>
Source record: 180734

It's always interesting to see what conclusions are drawn from surveys. It seems to me there's more difference between preschoolers and scientists than formal education (although some scientists are definitely much more like preschoolers than others). I think there's as much evidence presented by this study which indicates that increasing one's height, weight, age, or distance between the ears decreases one's ability to think.

Roy Lewallen, W7EL

"Terrence R. Redding, Ph.D." wrote:
>
> Thus providing some support for the notion that a formal education
> decreases one's ability to think.
>
> Terry - W6LMJ
>
> > . . .

> > According to Andersen Consulting Worldwide, around 90% of the
> > scientists they tested got all questions wrong. But many
> > preschoolers got several correct answers.
>

1943. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8prg48$pn6$1@nnrp1.deja.com>
Source record: 180735

In article <39ce10c0.93989639@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Thu, 14 Sep 2000 13:43:07 -0400, sideband <sideband@cac.net> wrote:
>
Snip:)
> 73's
> Richard Clark, KB7QHC
>
> p.s.
> I hope it will come as a pleasant surprise that you will need neither
> pliers nor torch to build my design. A simple tape measure (metric)
> will be enough, insulated guy lines, and perhaps several dozen
> tie-wraps.
> rwc
>

Richard,
It looks like you have again outdone yourself in practicality, I love
it!
Glad to see that it looks this efficient as far as construction is
concerned and this is glad news just when I was preparing to stretch
out the big net lattice to support the test unit.

Dogs, Cats and all Saints accepted for potential radiateive perusal.
--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?

Sent via Deja.com http://www.deja.com/
Before you buy.

1944. Re: Mixed Blessing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C142B5.3FD60EA5@oltraining.com>
Source record: 180736
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

Put up a statue of a great horned owl on the antenna - that should keep them away. Another solution may be to hang strips of cloth from the antenna and tower - one Expedition did that.

Hope the suggestions help.

Terry - W6LMJ

VA3KC wrote:

> Hello,
>
> I'm am recently the proud owner of a 70' free-standing tower and a Mosley
> Pro57B. I've been working up to this installation for years and I'm having
> a blast! Unfortunately, so are the local birds and my cedar deck is now
> covered in bird crap!
>
> I'd appreciate some helpful hints from anyone who has solved this problem!
>
> Many thanks in advance...
>
> Casey
> VA3KC
> va3kc@home.com

--

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1945. Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <Tobw5.12576$XT1.206736@news5.giganews.com>
Source record: 180737

I have a couple of these. They work OK under indoor controlled light situations. Outside, where the contrast ratio may be extreme, they don't. The automatic iris range is quite limited. They do have a range of about 100 feet out of the box. The receivers are very susceptable to nearby microwave oven QRM. Given these limitations, the X10 equipment could be quite adequate for certain applications.

73 de Jack

Terrence R. Redding, Ph.D. wrote in message
<39C1301E.2AE4DE39@oltraining.com>...
>http://www.x10.com/products/x10_vk45a.htm sells a 2.4 GHz camera and receiver
>for less then a $100 bucks. I have one in my office at
>http://www.olt.net/webcam/
>
>The produce good color images and also include an audio channel.
>
>Here is an excerpt from their web site.
>
>
>XCam2 is a Tiny Wireless 2.4GHz Super Sharp COLOR Video Camera that lets you
>view ALL the action!
>
>* Instant LIVE audio and video
>* Works Right Out of the Box
>* Sets Up in Minutes (hassle-free)
>* Hands-free operation
>* 2.4GHz transmitter (clear, sharp)
>
>The setup includes both the wireless camera and the receiver. The receiver
>outputs RF and RCA feeds.
>
>Terry - W6LMJ
>
>"g0nmy@callnetuk_dot_com" wrote:
>
>> "FxBxIsnoop" <fxbxisnoop@aol.com> wrote in message
>> news:20000830223223.06354.00000699@ng-fx1.aol.com...
>> > We are a law enforcement agency with an antenna problem. I need
>> information
>> > from anybody who uses a 2.4 Ghz video transmitter/receiver system. The
>> system
>> > we have uses a small 1 watt transmitter with a vendor-supplied rubber

duck
>> > antenna approximately 4 inches in length with an SMA connector. Due to
>> > concealment requirements it is not possible to use a directional
antenna
>> on the
>> > transmitter. To overcome a dead spot I need a directional antenna for
the
>> > receiver, which currently has a vendor-supplied rubber duck antenna
>> > approximately 4 inches in length with an SMA connector. Which
directional
>> > antennas have you guys had the best results with in the 2.4 Ghz band?
If
>> anyone
>> > has constructed a good homemade antenna, especially something along the
>> lines
>> > of a parabolic reflector I would be interested in seeing your
>> plan/schematic.
>> > The area where I need coverage is a couple hundred feet beyond where
the
>> signal
>> > drops out. Thanks.
>>
>> Well I would not consider 1W a small signal at 2.4GHz, however,
>> any form of parabolic dish could be used at this freq with a dipole
mounted
>> at the focal point.
>> a dipole of around 3" could be used you would have to find the focal
point
>> of the dish.
>> f = D^2/16c
>> so the focal point of the dish is equal to the Diameter of the dish
squared
>> divided by 16 times the depth of the dish at the centre.
>> so a 1ft diameter dish with a depth of 2 inches at the centre would give
>> 144/16x2 = 4.5 so the focal point would be 4.5"
>> remember that this is the focal POINT so you would have to bring your
dipole
>> in towards the dish.
>> this would give you a fair amount of gain and if you fit a pre-amp would
>> really hot things up.
>>
>> From what other comments have been made to your request some seem a
little
>> negative, which does not supprise me with today's radio hams.
>> As far as I am concerned by increasing the sensitivity of the receive
side
>> would not break any licence only if you increased the transmit side which
>> could cause interference to other band users.
>> However, I do not live in the U.S. so do not know your laws too well, but
>> using common sense I cannot see a problem with what you are asking.

>>
>> And besides if it helps to catch criminals there that's great by me.
>> hope this helps a little.
>> cheers Mark
>> G0NMY
>
>--
>-----------
>Terrence R. Redding, Ph.D. | over 90 Computer Courses
>President/CEO | GED Courses
>OnLine Training, Inc. | Insurance Agent Licensing
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> | SDL and Educational Research
>
>

1946. Re: Wanted: Stealthy Antenna Ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C14350.544A99B2@oltraining.com>
Source record: 180738

Can you put up a shortened vertical built to look like an umbrella over
a yard table? My last hidden antenna was a simple flag pole.

Terry - W6LMJ

W&B wrote:

> Here's my QTH limitations...
>
> 1/4 acre lot
> Need a stealthy antenna to comply with CC&Rs
> Highest vert structure (roof) is only about 23'
> Desert type landscape (AZ)
> Desire to work mainly 17, but would like to cover 10-40
>
> Any suggestions for this challenge would be appreciated.
>
> Wade, kb7our

--

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1947. Re: Need help locating 60" SS tapered ship?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C14496.449DC7F4@oio.net>
Source record: 180739

Benjamin Blavat wrote:
>
> Anyone know a source? I am looking for a 60+" whip with a 3/8x24 base.
> Thanks,
>
> --
> 73's from W4BEN,
> Benjamin Blavat

Try K5BUG, he usually has a few laying around...
'Doc

1948. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C14631.A12496E1@oltraining.com>
Source record: 180740

The only antenna that has ever worked well for me on 75 meters phone, while mobile, has been the Hustler with high power coil. I have compared it to an 75 meter Yasu mobile antenna system and a Ham Stick.

I believe the Texas Bug Catchers would work as well, but have never had the opportunity to try one.

Terry - W6LMJ

wd5bjq@bigfoot.com wrote:

> In article <39A99926.8084B443@saber.net>,
> ka5s@saber.net wrote:
> > rsm wrote:
> >
> > > Does anything really work very well?
>
> I have no complaints with what I am running.
>
> http://www.qsl.net/wd5bjq/ (See Mobile Information)
>
> I have the Hustler Heavy Duty Ball Mount/Spring.
> Mounted in the Center of my Tool Box (Back of Pickup Truck).
> Use the Hustler RM-75S Resonator for 80 Meters.
>
> Of course.. I do run a little bit of Power ;o)
>
> 73's Keith
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

--

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1949. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <hvi2sskd20pbkm5q2spt5h05frl0dj5a4r@4ax.com>
Source record: 180741

On Thu, 14 Sep 2000 14:12:01 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I think there's as
>much evidence presented by this study which indicates that increasing
>one's height, weight, age, or distance between the ears decreases one's
>ability to think.

Some years ago I saw a pair of graphs which "proved" that the increase
in lung cancer in women was exactly correlated with the increase in
sales of nylon stockings. As Bill Clinton knows, you can prove or
disprove anything.

73, Bill W7TI

1950. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39C14F2E.A1B8C656@west.raytheon.com>
Source record: 180742

'Doc wrote:
>
> Bart,
> I'm aware of what a 'double' bazooka antenna is, but what's
> a 'single' bazooka???
>

The so called 'single' bazooka uses one shorted 1/4 wl stub in parallel with the feedpoint of the dipole as opposed to the 'double' bazooka which uses two. The two stubs in parallel are equivalent to a single stub of half the characteristic impedance and provide a nice symmetric mechanical arrangement. In addition to the reactance compensation effect of the stub, using large diameter coax for the radiator has the effect of increasing bandwidth. Unfortunately, typical coax cable isn't structurally very suitable for supporting itself over long horizontal spans.

bart
wb6hqk

1951. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000914183937.24471.00000375@ng-fd1.aol.com>
Source record: 180743

>I wonder, has anyone on in the newsgroup put up a single element quad
>and compared it to an inverted vee?
>
>All responses appreciated.
>
>Terry
>

I used single element delta loop, (easier to fit on the tower). If you feed it at the top or the bottom in the middle, you get horizontal polarization (or with quad top/bottom corner/side feed) and at low heights radiation straight up. If you feed Delat loop 1/4 wave from the top apex you get vertical polarization and low angle radiation. By moving the feed point + - from the ideal position and by adjusting the height and length of the horizontal side close to ground, you can find 50 ohm point and direct feed with coax. With vertical polarization, good ground or bunch of radials will greatly enhance the performance at low angles. It beats inverted Vee in performance.

Yuri, K3BU, PDH (pretty dumb ham)

ps
on this ham newsgroup there is no need for titles, corporate ladder places etc. We are all just PDH on the first name basis. (Except for one freak who flashes his "credentials" when people don't agree with his garbage.)

1952. Re: Flag pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Kubwa <Richard@reliable-net.net>
Message-ID: <ss2lu4f7ct642@corp.supernews.com>
Source record: 180744

OOPS........I forgot to say 10 meter.
Old age and all that rot you know.
Richard

"Steve Giron" <sgironx@home.com> wrote in message
news:0g6w5.25248$qM3.162106@news1.bnapk1.occa.home.com...
> HF or VHF?
>
> "Kubwa" <Richard@reliable-net.net> wrote in message
> news:ss1crhu1ct681@corp.supernews.com...
> > Yes....now that I have (permission) to put in a flag pole
> > I would like any/all the info I can get for making the best
> > darn (vertical) antenna possible,,,the first time.
> > Thanks
> > Richard
> >
> >
>
>

1953. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C162E6.C77BA270@eznec.com>
Source record: 180745

I recall going through the analysis some time ago and concluding that really good bandwidth compensation for a dipole would require a stub with Z0 on the order of 7 ohms or so. (I'm sure this would depend on the antenna's wire diameter.) If I remember correctly, the broadening effect of the double bazooka's stubs is pretty small because of their higher impedance. Making the wire diameter larger and introducing loss will of course further broadband the antenna, as you've mentioned, and this might be more of the double bazooka's trick than the stubs.

Roy Lewallen, W7EL

Bart Rowlett wrote:
>
> 'Doc wrote:
> >
> > Bart,
> > I'm aware of what a 'double' bazooka antenna is, but what's
> > a 'single' bazooka???
> >
>
> The so called 'single' bazooka uses one shorted 1/4 wl stub in
> parallel with the feedpoint of the dipole as opposed to the 'double'
> bazooka which uses two. The two stubs in parallel are equivalent to a
> single stub of half the characteristic impedance and provide a nice
> symmetric mechanical arrangement. In addition to the reactance
> compensation effect of the stub, using large diameter coax for the
> radiator has the effect of increasing bandwidth. Unfortunately,
> typical coax cable isn't structurally very suitable for supporting
> itself over long horizontal spans.
>
> bart
> wb6hqk

1954. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <nqp2ss88005gt0rblk0ob3ug6ac5i9j814@4ax.com>
Source record: 180746

Zowie! A well thought out, well constructive, informative NG message about Fractal antennae! Chip should take this example to heart.

Thank you very much, Richard. You have disseminated more useful information in this one message than Chip has managed to in the last month and a half.

From this, I gather that, were I to desire it, I could build a Fractal which would be broad banded enough to cover both 10 and 11 meters with a relatively safe SWR and a decent radiation pattern.

Some background. I'm currently a CB operator (Not a CB'er. I know how to use SideBand properly ::grin::). I have been a member of the X-Ray (The Trans-World Sidebander's) club, and was Davis County, Utah, controller for the club for over a year, before I had to move. I am currently studying my code, trying to overcome audio dyslexia so that I may gain my General Class license in one shot. HF is where I want to "live" I enjoy atmospheric propagation, or "shooting skip" immensely. I'd like to do it legally someday, if I could just get that darned code down.

When I do get my ticket, I'd like to build a small (so the landlord doesn't complain too much), single antenna that would cover both 10 and 11 meters, as I will still talk on the CB, with a CB, after getting my license. Licensing doesn't mean I have to give up my friends on the CB band, ya know. ::grin::

Larger antennae for the lower bands, (20, 40, 60, 80, etc) probably won't be possible at my current location, and I'd like to have the best "ears" and transmit I can get from the smallest antenna possible for my location, on my bands of choice.

So from what you've written here, I'm assuming that a fractal design ::might:: be one possible answer.

But is it do-able?

Thanks again for your reply.

-SSB

On or about Thu, 14 Sep 2000 18:54:14 GMT, rwclark@seanet.com (Richard Clark), using the forum rec.radio.amateur.antenna did say:

:On Thu, 14 Sep 2000 13:43:07 -0400, sideband <sideband@cac.net> wrote:
:
:>Richard:
:>

:>Thanks for this information, which Chip has been unwilling to publish.
:>
:>I gather from these data that the antennas tested were not constructed
:>for operation on any particular band. (I may be wrong on this.)
:>Assuming I'm incorrect in this assumption, is it possible to construct
:>an antenna such as these for optimal use on a particular band,
:>sacrificing other bands' performance?
:>
:>I guess what I'm asking is this: What is the benefit of constructing
:>such an antenna if you're only interested in certain bands, other than
:>wearing out a pair of needlenose pliers and using all the butane in
:>your soldering iron?
:>
:>I'm not trying to be glib or curt, I'm just wondering what the real
:>advantages of these antennae are, aside from the size, if one is only
:>interested in a particular band or set of bands?
:>
:>-SSB
:
:Hi OM,
:
:I found nothing offensive, curt, or glib about your reasonable
:questions. I encourage any correspondent to participate in similar
:manner.
:
:As for your assumption:
:>I gather from these data that the antennas tested were not constructed
:>for operation on any particular band.
:This is entirely correct.
:
:My method was to ignore every consideration EXCEPT for wire length, or
:antenna height. I held these constant for every variation of design
:so that I could compare designs across all the various fractal forms.
:As a consequence of this method, I let the characteristics speak for
:themselves. Those characteristics revealed an ordering, and that
:ordering reveals that the simpler geometrical characteristics strip
:away the aura of magic from fractal.
:
:There are no pluses there are no minuses, there is simply the
:reporting of results of the variations made. There is no implication
:of best, there is no implication of worst, such assessments are beyond
:the scope of my surveys and they would be an inappropriate presumption
:on my readers' and their needs. My intent is to remain neutral and
:anticipate nothing. (Yes, this can make for rather dry reading.)
:
:This is not to say my pages are bereft of opinion or taking a stance.
:such writing is found in the side pages where I review designs that
:fall outside of my surveys. My practical design, soon to be
:published, is also a side publication. I hope it will satisfy the
:needs of those who wish to delve into this topic with wire and

:needle-nose pliers; but it remains a sidebar to my investigations.
:
:Why do I characterize these as "side" issues? Because this is simply
:derivative work of discovery not work that reveals basics of design.
:I seek satisfaction in the latter path (which in fact makes this
:posting very ON TOPIC), but I acknowledge the need for practical and
:demonstrable designs so that our readers here can relate to real
:applications. However, this practical design being a sidebar, it runs
:the risk of not being a very good example of a fractal implementation.
:This may become evident to the readership after I publish.
:
:I am not promising fractal dogs, but neither am I promising fractal
:saints. I can promise it will not be a Fragile Antenna.
:
:To attend to your more specific question (a very good one):
:>I'm just wondering what the real
:>advantages of these antennae are, aside from the size, if one is only
:>interested in a particular band or set of bands?
:
:My interest is not with small fractals. They are largely one band
:focused as an optimization. The k2 and my review show how
:"advantages" are found (it also shows how the application of a fractal
:solution is a forced one and is not necessarily the best solution).
:
:I find large fractals much more interesting, and in regard to your
:question, there may be more advantage found there. Of course the
:penalty is that you have a very large, complex structure. On the plus
:side, you also have a High Z extremely wide band antenna (on the plus
:only if you can cope with the High Z tho') and it shows gains in
:excess of 0 dBi (compare to the k2 being almost 5 dB down from 0 - but
:this comparing apples to road-apples... some might dispute which is
:sweeter).
:
:returning to the first assumption:
:>I gather from these data that the antennas tested were not constructed
:>for operation on any particular band.
:I consider it within the provence of an amateur to be able to
:successfully scale a design to any particular frequency (it is in fact
:extremely easy using EZNEC), provided of course, if they had
:reasonable access to the EZNEC file. This last assumption (mine) has
:always been supported by myself for all those who desire the file or
:the data.
:
:Now this may all sound hi-handed, my writing style certainly lends
:itself to such a stigma. It does not mean I will repel you with "do
:it yourself" because I realize that those who CAN do it for themselves
:are asking not for an answer, but for reassurance. This is not
:unreasonable either.
:
:73's

:Richard Clark, KB7QHC
:
:p.s.
:I hope it will come as a pleasant surprise that you will need neither
:pliers nor torch to build my design. A simple tape measure (metric)
:will be enough, insulated guy lines, and perhaps several dozen
:tie-wraps.
:rwc

1955. help with 4-btv

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jim Rayburn <jimjr@dynasty.net>
Message-ID: <v%dw5.188$Cq3.1396@newsfeed.slurp.net>
Source record: 180747

i need the measurements for putting the hustler 4-btv together in the ssb
range.
thanks for your help.

jim
kc4bqk

1956. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39C17228.DA37D05D@west.raytheon.com>
Source record: 180748

Roy Lewallen wrote:
>
> I recall going through the analysis some time ago and concluding that
> really good bandwidth compensation for a dipole would require a stub
> with Z0 on the order of 7 ohms or so. (I'm sure this would depend on the
> antenna's wire diameter.)

I went through the same analysis a few years back and recall 10 to 12 ohms was optimum for the particular 75/80m installation I was contemplating. I eventually concluded that a much better approach was to simulate the stubs with a L/C tank circuit where L and C could be chosen freely. Using an LC tank also allows an additional impedance transformation either link coupling or using an adjustable feed tap on the tank. My recollection is that losses of the tank are significant but considerably lower than stubs made from RG-58 or RG-213 coax.

> If I remember correctly, the broadening effect
> of the double bazooka's stubs is pretty small because of their higher
> impedance.

Seems like the ideal charactistic impedance for the stubs is something like Zf^2 / Za where Zf is the geometric mean of the feedpoint resistance at the series and parallel resonant frequencies, typically 75 ohms, and Za is the characteristic impedance of the antenna considered as a lossy transmission line, typically 600 - 800 ohms.

> Making the wire diameter larger and introducing loss will of
> course further broadband the antenna, as you've mentioned, and this
> might be more of the double bazooka's trick than the stubs.

In fact, if the stubs are made from RG-58 cable, the increase in bandwidth due to the losses is greater than the reactance compensation. The increase in the bandwidth resulting from using a radiator the size of RG-58 instead of #12 AWG is significant but minor compared to the effects of reactance compensation.

All in all, it's an interesting antenna to analyze and understand but seldom makes sense in a practical situation. I opted for a multiband solution using open wire feed and a manual tuner located in the shack.

bart
wb6hqk

>

1957. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <t1vrp8.4kk.ln@mail.specsol.com>
Source record: 180749

Fractenna <fractenna@aol.com> trolled the group:
>>I maintain a web sight for NEC. Send me the model and pix and I will
>>post it there. Please send it to NEC2@home.com The web page is
>>http://members.home.net/nec2
>>
>>

> Unauthorized images of MI2 constitute copyright infringement if you do as you
> suggest. If you wish a copy and use of the file and image(s), you can request
> so from:

Unless you have the "MI2" hanging in a gallery somewhere, this is pure BS.

So now you're also in the art business?

<rest snipped>

Jim Pennino

1958. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39C1892C.D2DA93F7@fgi.net>
Source record: 180750

I think Chip is absolutely correct, at least in his own mind.
If you display the" ball" or" mass of wire" or anything that could
resemble' it', you may be violating the American secrecy laws that
can be invoked whenever this Nation is thought to be in peril.
By displaying any information about these unique' wire' arrangements,
you make it much easier for unfriendly nations such as Iraq
to leapfrog years of tests and huge expense to instantly get at
the 'cutting edge' of this extraordinary science.
On the other hand if you made this 'thing' yourself you may share
the image with anybody, including fellow Canadians, Chinese and the Iraq's
as one can assume that the 'secret" wasn't a 'secret' after all,
just much ado about nothing.

Regards
Art Unwin

Fractenna wrote:

> >I maintain a web sight for NEC. Send me the model and pix and I will
> >post it there. Please send it to NEC2@home.com The web page is
> >http://members.home.net/nec2
> >
> >
>
> Unauthorized images of MI2 constitute copyright infringement if you do as you
> suggest. If you wish a copy and use of the file and image(s), you can request
> so from:
>
> query@fractenna.com
>
> There are certain requirements of appropriate referencing and acknowledgement
> of the source and linking a site, to obtain this privelege. Also, you will be
> required to show evidence of likelihood of use (that is, some indication of
> likely web traffic).
> snip
> site.
>
> 73
> Chip N1IR

1959. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C188CA.DAF20211@eznec.com>
Source record: 180751

Fractenna wrote:

> . . .

> NEC4 produces a different result than NEC2 because you can model more segments.
> I ALWAYS oversample the current density, and use UNIFORM segment DENSITY
> (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT NUMBERS
> PER WIRE!

>. . .

I concur with the advice about segment length.

I haven't done very much modeling with native NEC-2, but believe it can handle 10,000 segments, if properly compiled for that value, just as NEC-4 will. (The limitation is really due to internal use of numbers over 10,000 to represent patches. I imagine it would be fairly simple to modify for more.) Certainly the pro versions of EZNEC handle the same number of segments regardless of calculating engine. (EZNEC 3.0 is designed for 10,000, but I don't know of anyone yet who's run a model with many more than 7,000. Earlier DOS versions max out at around 3000 - 3500 due to memory limitations.)

Roy Lewallen, W7EL

1960. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8ps15qsde1@slb7.atl.mindspring.net>
Source record: 180752

Only liberals actually clean their guns, real men shoot dirty weapons!

Dirty Pistol

--
Peter O. Brackett
Morrisville, NC
--
sideband <sideband@cac.net.dontspamme> wrote in message
news:tjeurs8ijk9ohckg9sf3cu9k6pun6uqjln@4ax.com...
> Your voices tell you that too?
>
> Damn, I'm not the only one.
>
> >:-{>=
>
> -SSB
>
> On or about Tue, 12 Sep 2000 14:12:19 -0700, Roy Lewallen
> <w7el@eznec.com>, using the forum rec.radio.amateur.antenna did say:
> :Now, if you'll excuse me, the voices are telling me it's time to go
> :clean my guns. . .
> :
> :Roy Lewallen, W7EL
>

1961. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <M37BORpW16PSGfFfHIbaleBWcMYH@4ax.com>
Source record: 180753

On Thu, 14 Sep 2000 20:12:58 -0400, sideband <sideband@cac.net> wrote:

>Zowie! A well thought out, well constructive, informative NG message
>about Fractal antennae! Chip should take this example to heart.
>
>Thank you very much, Richard. You have disseminated more useful
>information in this one message than Chip has managed to in the last
>month and a half.
>
>From this, I gather that, were I to desire it, I could build a Fractal
>which would be broad banded enough to cover both 10 and 11 meters with
>a relatively safe SWR and a decent radiation pattern.
>
There are several examples that could be massaged to fit that requirement. Be advised however, for that much coverage, we are talking about a BIG fractal.

>Some background. I'm currently a CB operator (Not a CB'er. I know how
>to use SideBand properly ::grin::). I have been a member of the X-Ray
>(The Trans-World Sidebander's) club, and was Davis County, Utah,
>controller for the club for over a year, before I had to move. I am
>currently studying my code, trying to overcome audio dyslexia so that
>I may gain my General Class license in one shot. HF is where I want to
>"live" I enjoy atmospheric propagation, or "shooting skip" immensely.
>I'd like to do it legally someday, if I could just get that darned
>code down.
>
I hope you achieve your goals.

>When I do get my ticket, I'd like to build a small (so the landlord
>doesn't complain too much), single antenna that would cover both 10
>and 11 meters, as I will still talk on the CB, with a CB, after
>getting my license. Licensing doesn't mean I have to give up my
>friends on the CB band, ya know. ::grin::
>
>Larger antennae for the lower bands, (20, 40, 60, 80, etc) probably
>won't be possible at my current location, and I'd like to have the
>best "ears" and transmit I can get from the smallest antenna possible
>for my location, on my bands of choice.
>
>So from what you've written here, I'm assuming that a fractal design
>::might:: be one possible answer.
>
>But is it do-able?
>
>Thanks again for your reply.

>
>-SSB

Hi OM,

My choice of large fractal for your antenna above is the safe choice. However there are a number of risk choices you can make from the variety of small fractals. By risk I mean that some fractal designs offer closely paired resonances, and there is the possibility that they could be scaled to cover 11 & some of 10. I suggest that if you have EZNEC, that you can shoulder this risk by taking the EZNEC file and experimenting.

Be advised that the following page reference is rated PG.
It contains assumptions of a perfect world where every design is judged against its peer in the purity of math. Intrusions of reality can be disturbing, but if planned for can give you the edge in which design to choose.

By referencing my page:
http://www.qsl.net/~kb7qhc/antenna/fractal/Constant%20Height%20Comparisons.htm
you may note that the last entry called Koch Quadratic contains two (2) entries for the 10M band. The part of the page I refer to is the reporting of best gain figures which is in table form. We are not immediately concerned with the figures as we are the significance of there being two (2) entries. Un-documented is the fact these two entries are at two different frequencies where there is a resonance or relatively low SWR (suggesting it would be tunable). You may note from this page there are a number of opportunities offering themselves as risk choices.

OK - you can look at those numbers for each entry. You have your choice of an antenna that will give you 11 dBi in the DX angles, or you can choose the one that will give you 8 dBi over those same elevation angles (0 - 15 deg). You may enjoy the sensation of tension as you ponder your choice that I believe must descend to "how easy is to build this sucker?" Or the less cryptic "is it worth 3 dB?" Or more to the point "16 meters TALL?!"

Now as for your last question (if you've survived the shock of my last statement):
>But is it do-able?
Look for a separate posting announcing my work.

73's
Richard Clark, KB7QHC

1962. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C18A6B.C4159718@mindspring.com>
Source record: 180754

Has a miracle happened and I am no longer able to see frac posts? I only see 6 (7 including this one) posts in this thread and none of them are from freak or contain the stuff you guys are posting.....what gives?

Arthur Unwin wrote:

> I think Chip is absolutely correct, at least in his own mind.
> If you display the" ball" or" mass of wire" or anything that could
> resemble' it', you may be violating the American secrecy laws that
> can be invoked whenever this Nation is thought to be in peril.
> By displaying any information about these unique' wire' arrangements,
> you make it much easier for unfriendly nations such as Iraq
> to leapfrog years of tests and huge expense to instantly get at
> the 'cutting edge' of this extraordinary science.
> On the other hand if you made this 'thing' yourself you may share
> the image with anybody, including fellow Canadians, Chinese and the Iraq's
> as one can assume that the 'secret" wasn't a 'secret' after all,
> just much ado about nothing.
>
> Regards
> Art Unwin
>
> Fractenna wrote:
>
> > >I maintain a web sight for NEC. Send me the model and pix and I will
> > >post it there. Please send it to NEC2@home.com The web page is
> > >http://members.home.net/nec2
> > >
> > >
> >
> > Unauthorized images of MI2 constitute copyright infringement if you do as you
> > suggest. If you wish a copy and use of the file and image(s), you can request
> > so from:
> >
> > query@fractenna.com
> >
> > There are certain requirements of appropriate referencing and acknowledgement
> > of the source and linking a site, to obtain this privelege. Also, you will be
> > required to show evidence of likelihood of use (that is, some indication of
> > likely web traffic).
> > snip
> > site.
> >
> > 73
> > Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to use a
spell checker and don't take criticism well.

1963. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <co33ssc78hc5oc7tpasujts784s6v1p6q5@4ax.com>
Source record: 180755

Richard:

Again, Thank you.

Yes, 16 meters is a bit tall for an antenna. at this site. I had gathered, and I must have been incorrect, that Fractals were small in comparison to the height of, say, a dipole for the same frequency range. When I do get on the air for real, I'm going to stay mostly between 27.355 and 29.6?? Yes... that's 2.3~ Mhz bandwidth. I'm aware that this can pose problems in antenna design, if I don't wish to use a tuner.

I prefer SSB as my mode of operation, as I've stated before, and I'm not 100% sure which frequencies on 10M are acceptable for SSB, and which are FM/AM/Other. Perhaps a bit more research on my part might help narrow down my choices.

I consider a "safe" swr to be anything around 2.5:1 or lower. Maybe a dipole set for the center of my desired transmit range would be the better choice, using a tuner where necessary at the ends? Or would a fractal design help me realize the idea of transmitting without a tuner?

I'm just insanely curious about this idea. If the doggone thing actually can meet these needs, then I'm game to try one out, provided it's something I can put up in a tree, or on the side of the apartment building.

If not, I guess I'll just bite the bullet and run a couple of vertical dipoles, one for 10 and one for 11, out in the tree.

Thanks again, for the information, and your time. I do realize you are busy with this project, and others, and that makes these drops of information all the more valuable to me.

73's and good DX.

-SSB

On or about Thu, 14 Sep 2000 19:33:36 -0700, Richard Clark <rwclark@rwclark.seanet.com>, using the forum rec.radio.amateur.antenna did say:

:On Thu, 14 Sep 2000 20:12:58 -0400, sideband <sideband@cac.net> wrote:
:
:>Zowie! A well thought out, well constructive, informative NG message
:>about Fractal antennae! Chip should take this example to heart.
:>

:>Thank you very much, Richard. You have disseminated more useful
:>information in this one message than Chip has managed to in the last
:>month and a half.
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:>From this, I gather that, were I to desire it, I could build a Fractal
:>which would be broad banded enough to cover both 10 and 11 meters with
:>a relatively safe SWR and a decent radiation pattern.
:>
:There are several examples that could be massaged to fit that requirement. Be advised
:however, for that much coverage, we are talking about a BIG fractal.
:
:>Some background. I'm currently a CB operator (Not a CB'er. I know how
:>to use SideBand properly ::grin::). I have been a member of the X-Ray
:>(The Trans-World Sidebander's) club, and was Davis County, Utah,
:>controller for the club for over a year, before I had to move. I am
:>currently studying my code, trying to overcome audio dyslexia so that
:>I may gain my General Class license in one shot. HF is where I want to
:>"live" I enjoy atmospheric propagation, or "shooting skip" immensely.
:>I'd like to do it legally someday, if I could just get that darned
:>code down.
:>
:I hope you achieve your goals.
:
:>When I do get my ticket, I'd like to build a small (so the landlord
:>doesn't complain too much), single antenna that would cover both 10
:>and 11 meters, as I will still talk on the CB, with a CB, after
:>getting my license. Licensing doesn't mean I have to give up my
:>friends on the CB band, ya know. ::grin::
:>
:>Larger antennae for the lower bands, (20, 40, 60, 80, etc) probably
:>won't be possible at my current location, and I'd like to have the
:>best "ears" and transmit I can get from the smallest antenna possible
:>for my location, on my bands of choice.
:>
:>So from what you've written here, I'm assuming that a fractal design
:>::might:: be one possible answer.
:>
:>But is it do-able?
:>
:>Thanks again for your reply.
:>
:>-SSB
:
:Hi OM,
:
:My choice of large fractal for your antenna above is the safe choice. However there are a
:number of risk choices you can make from the variety of small fractals. By risk I mean
:that some fractal designs offer closely paired resonances, and there is the possibility
:that they could be scaled to cover 11 & some of 10. I suggest that if you have EZNEC,
:that you can shoulder this risk by taking the EZNEC file and experimenting.

:
:Be advised that the following page reference is rated PG.
:It contains assumptions of a perfect world where every design is judged against its peer
:in the purity of math. Intrusions of reality can be disturbing, but if planned for can
:give you the edge in which design to choose.
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:By referencing my page:
:http://www.qsl.net/~kb7qhc/antenna/fractal/Constant%20Height%20Comparisons.htm
:you may note that the last entry called Koch Quadratic contains two (2) entries for the
:10M band. The part of the page I refer to is the reporting of best gain figures which is
:in table form. We are not immediately concerned with the figures as we are the
:significance of there being two (2) entries. Un-documented is the fact these two entries
:are at two different frequencies where there is a resonance or relatively low SWR
:(suggesting it would be tunable). You may note from this page there are a number of
:opportunities offering themselves as risk choices.
:
:OK - you can look at those numbers for each entry. You have your choice of an antenna
:that will give you 11 dBi in the DX angles, or you can choose the one that will give you 8
:dBi over those same elevation angles (0 - 15 deg). You may enjoy the sensation of tension
:as you ponder your choice that I believe must descend to "how easy is to build this
:sucker?" Or the less cryptic "is it worth 3 dB?" Or more to the point "16 meters TALL?!"
:
:Now as for your last question (if you've survived the shock of my last statement):
:>But is it do-able?
:Look for a separate posting announcing my work.
:
:73's
:Richard Clark, KB7QHC

1964. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C19359.912D2FEB@eznec.com>
Source record: 180756

Briefly, EZNEC, both DOS and Windows versions -- is limited to 500 segments. There are two varieties of EZNEC pro, EZNEC-M and EZNEC/4. These are identical except that EZNEC/4 allows use of NEC-4 as well as NEC-2 as its calculating engine. As I mentioned before, v. 3.0 of the EZNEC pro programs is designed to handle 10,000 segments but as far as I know has been tested only to about 7,000 so far. DOS EZNEC pro is limited to about 3000 - 3500 by memory requirements.

Full information on all versions of EZNEC is available at http://eznec.com. I'm glad to answer questions, but request that you take a look at the web site first if possible.

Roy Lewallen, W7EL

Fractenna wrote:
>
> I'd have to ask Bob Hohlfeld about this; been a long time since I coded and an
> even longer time since I used FORTRAN.
>
> I can see that you think there is nothing in the code that precludes more NEC2
> segments; I don't doubt that.
>
> It would have been more precise if I referred to EZ NEC and EZ NECPro/(4).
> Perhaps you could kindly guide others on which have segment limits, and so on.
>
> I almost never use EZNEC (as opposed to ENECPro/4) anymore, so perhaps my
> memory is vague on this. For example: what are the segment limits on EZNECWin?
>
> Thanks!
>
> 73
> Chip N1IR

1965. Re: Help RE. triband yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39C19873.490B4227@fgi.net>
Source record: 180757

Force 12 uses aluminum tubing that seems considerably softer
than other makes!
Art Unwin

Terrence R. Redding, Ph.D. wrote:

> I had great luck with a TH7DXX for eight years in Oklahoma. It withstood high
> winds and several ice storms.
>
> Terry - W6LMJ
>
> Steve Zumbrun wrote:
>
> > I'm putting up new 55 foot tower. I need some help with the antenna. I
> > want to put up a triband yagi. I live in Iowa and we get alot of wind and
> > ice here. I would appreciate comments from users of various tribanders such
> > as Force 12, M2, Cushcraft and Mosley antennas as to there strength,
> > durability, etc. Thanks and 73, Steve W0SZ
>
> --
> -----------
> Terrence R. Redding, Ph.D. | over 90 Computer Courses
> President/CEO | GED Courses
> OnLine Training, Inc. | Insurance Agent Licensing
> | Internet Services
> http://www.oltraining.com | Web Broadcasting
> | Web Site Design
> (561) 357-0841 voice | Training Development
> (561) 357-0842 FAX | Keynote Speaker
> | SDL and Educational Research

1966. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C1980D.70903BE9@eznec.com>
Source record: 180758

A number of years ago, Randy Rand, AA2U was inducted into QRP ARCI's QRP Hall of Fame. As I recall, he had worked over 300 countries while running QRP (as defined as 5 watts maximum output on CW, 10 watts PEP sideband). This was well before anyone in the amateur community had heard of fractal antennas, so I'm sure one wasn't among the antennas he used.

I'm afraid I'm not very impressed by how many countries a person on the East Coast running a kW can rack up, and it sounds like a number of other folks aren't either.

Roy Lewallen, W7EL

Chuck O'Neal wrote:
>
> DXCC has NOTHING to do with antenna performance...
> so let's not be fooled by more obfuscation...
>
> For example, I have NO DXCC rating at all, and I am at least 20 dB
> louder than N1IR....anywhere...running 1 KW...
>
> The guy that had the highest DXCC # ran only dipoles and 100 W...,
> a W1...anyone know who that was???

1967. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C196EB.757C@wt.net>
Source record: 180759

Terrence R. Redding, Ph.D. wrote:
>
> The only antenna that has ever worked well for me on 75 meters phone,
> while mobile, has been the Hustler with high power coil. I have
> compared it to an 75 meter Yasu mobile antenna system and a Ham Stick.
>
> I believe the Texas Bug Catchers would work as well, but have never had
> the opportunity to try one.
>
> Terry - W6LMJ

The bugcatcher will outdo the hustler. Usually by a pretty good amount.
But depends on how good/tall the bugcatcher is also. You have short
ones/tall ones. The tall ones with good coils/hats hard to beat. The
hustler 80m super resonator fairly lossy. MK
--
http://web.wt.net/~nm5k

1968. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C196FA.E7DDE8C6@mindspring.com>
Source record: 180760

Fractenna wrote:

> >Has a miracle happened and I am no longer able to see frac posts? I only see
> >6 (7
> >including this one) posts in this thread and none of them are from freak or
> >contain
> >the stuff you guys are posting.....what gives?
>
> Sure wouldn't be a problem for me in reverse. Less work for the filters.
>
> 73
> Chip N1IR

Well, There goes that idea.....

1969. Re: Wanted: Stealthy Antenna Ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C1A2E8.FB297164@bigfoot.com>
Source record: 180761

"Terrence R. Redding, Ph.D." wrote:
> Can you put up a shortened vertical built to look like an umbrella over
> a yard table?

There's a 40m version of exactly that on page 100 of Jerry
Sevick's book, "Building and Using Baluns and Ununs".
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1970. 160/80M Vertical design question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Randall D. DuCharme" <randyd@NO-SPAMspecent.com>
Message-ID: <39C1A682.7DDBC549@NO-SPAMspecent.com>
Source record: 180762

Greetings all,

I'm contemplating building a dual band vertical for 160 and 80 meter use. I thought I'd try the simple, compact design I found in a book co-written by William Orr and Stuart Cowan (W6SAI and W2LX). They recommend using at least four 1/4-wave radials and four shorter ones run in random directions.

I have an R7 that I use for 40-10 and am wondering how I could apply their design to my project antenna. That is, how can I get reasonable performance with my antenna using very short radials like my R7 does. (It really works well!!) Does anyone know how to build such a thing?

Many thanks in advance.

--
Randall D DuCharme (KD5IZI) Proud to be 100% Microsoft Free!

Unsolicited commercial email (SPAM) received at this email address will not be tolerated. All spam is subject to a $200 per incident processing fee and possible legal action pursuant to US Code, Title 47, Chapter 5, Subchapter II, p.227,.

1971. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C1A564.8E2ACC61@bigfoot.com>
Source record: 180763

Reg Edwards wrote:
> So the equivalent input impedance of a set of buried,
> insulated, radials is that of a large capacitor in series
> with a resistance.

Is that resistance partially a radiation resistance?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1972. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C1B533.1ED79ABF@haertig.com>
Source record: 180764

One's perception of body heat frequently has nothing to do with actual body temperature.

When you are getting sick, frequently you feel very chilled, even though your core temperature may be above normal. This is because the mechanism your body uses to increase its core temperature (have a fever), is repetitive muscle spasms (shivering), which are interpreted as chills.

There are also paradoxical reactions, such as feeling chilled (clammy) when suffering from heat prostration. I suspect a chilled reaction to RF exposure is related to this, but certainly don't know it for sure.

Gray

Richard Clark wrote:
>
> On Thu, 14 Sep 2000 10:38:51 -0700, Gray Frierson Haertig
> <gfh@haertig.com> wrote:
>
> >
> > >The source of the FCC exposure standards ultimately derives from thermal
> > >effects on the body. In a rather gross simplification of the actual
> > >process, laboratory animals were exposed to increasing levels of RF
> > >radiation until a change in behavior was noted. Using simulated tissue
> > >models, the Specific Absorption Rate (watts of energy absorbed per gram
> > >of tissue) was determined. The basic standard was set at one thousandth
> > >of this level.
>
> Hi Gray,
>
> This is true as far as it goes. There is further to go. RF over
> exposure can also be experienced as a chill! This may seem
> counter-intuitive, but the damage is there nonetheless.
>
> 73's
> Richard Clark, KB7QHC

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1973. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C1B7B4.B1E29574@haertig.com>
Source record: 180765

The standard construction technique for medium wave broadcast ground systems in the US uses #10 or #12 bare solid copper. In soil types found in virtually all parts of the US, this will last as long as you are likely to be a ham. The exception are some volcanic soils or other very acidic soils and very salty soils. And these are only a problem if the soil is moist most of the time.

A typical amateur installation might have 10 to 15 radials about 60 feet long which is under 1,000 feet of wire. You should be able to find bare #10 Cu at about $100/thousand at an electrical supply house.

Gray

Larry Benko wrote:
>
> Roy,
>
> Very interesting. I have heard that the insulation makes no difference for
> buried radials also but it is nice to hear it from an "expert". The
> impedance due to the capacitance of all the wires to grouond through the
> insulation is indeed quite low at RF frequwncies. However if the buried
> radials were also used as a drain path for a lightning strike which has
> considerable energy in lower frequencies, would not bare wire be better?
> I have never seen an insulated ground rod.
>
> Larry Benko, W0QE
>
> Roy Lewallen wrote:
> >
> > Insulated wire is electrically just as good as bare wire for buried
> > radials, and it does last a lot longer in most soils. I recommend using
> > it.
> >
> > Roy Lewallen, W7EL

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1974. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C1B9B8.855E3020@haertig.com>
Source record: 180766

The biggest concern is having a long enough spike to penetrate the bark
and get a good bite into the wood. This is why a spike for climbing a
doug fir tree is longer than a spike for climbing a doug fir pole.

Gray

sideband@mindspring.com wrote:
>
> Dan Richardson wrote:
>
> > Yes, and tree climbing spikes are of different length depending upon
> > the type of tree. For example spikes used on redwood trees are much
> > longer than those use when climbing fir trees.
> >
> >
>
> I have never seen or used any spikes except pole spikes but that seems backwards
> to me. Wouldn't you want longer spikes on softer wood for more stability? Does
> this make sense?

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1975. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <ejq1ss4bgsul5pejprja9irlv1aaqghs79@4ax.com>
Source record: 180819

On 13 Sep 2000 20:19:25 GMT, Boatanchor Bob NA4G
<na4g@weedcon3.cropsci.ncsu.edu> wrote:

>Bill Turner <w7ti@jps.net> wrote:
>> You really need to figure out a way to insulate it from the trees.
>> Even small amounts of power can generate large amounts of voltage at
>> certain points along the wire - enough to start a fire on a dry day.
>
>Bill, do you have any additional information on this?
>
>Bob/NA4G
>

Only two things:

1. Fires have been reported on various newsgroups in recent years. I
personally have never had one.

2. I have observed the voltage present at the ends of antennas by
(carefully) drawing an arc. At the 100 watt level, arcs of 1/4 to 1/2
inch are easily drawn. That is more than enough to start a fire in a
dry tree.

73, Bill W7TI

1976. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C0EAC9.1E8BB88E@oio.net>
Source record: 180820

bkizerian@my-deja.com wrote:
>
> No doubt this question has be discussed before, but I sure could use
> the wisdom and experience of others.
>
> My question: What type of wire is best for buried radials? I want to
> use something that will hold up for many years, if possible. Is
> insulated wire okay? Seems to me it would deteriorate less than bare
> wire.
>
> Thanks
>
> Bruce Kizerian
> kk7zz

Bruce,
Insulated wire would usually last longer than uninsulated. The
'best' wire to use is what you have the most of, or, what is cheapest
to buy. Galvanized fence wire should be cheap and last as long as
any, I'd think. If your worried about lightning, forget anything
below about a size #4. That gets to be a bit expensive, unless your
talking commercial antenna ground systems. For the average 'ham'
ground, almost anything will work (insulated lasts longer).
'Doc

1977. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39C0EC68.6D585ECA@wb6hqk.ampr.org>
Source record: 180821

W4JLE wrote:
>
> I am not sure I understand your statement. How does the efficiency decrease?
>

The idea behind the bazooka (double or otherwise) dipole is that the shorted 1/4 wl stub provides reactance compensation to the basic 1/2 wl dipole radiating element.

For example, as the frequency is increased above resonance, the feedpoint impedance of the dipole becomes inductive. The impedance of the shorted stub is very high at resonance and becomes capacitive at frequencies above resonance. Connecting the stub in parallel with the radiator has negligible effect when both the radiator and stub are resonant. Above the resonant frequency, the capacitive stub is supposed to parallel resonate the inductive antenna.

A typical low dipole over ordinary ground for 75/80 meters may have a feedpoint impedance of 50 ohms at resonance. Adding the reactance compensation stub will create a parallel resonant condition at a single frequency above, and below the resonant frequency of the dipole. The parallel resonance will transform the resistive component of the feedpoint impedance upward to a value which is dependent on the characteristic impedance of the stub and the choice of parallel resonant frequency. A typical value for the transformed feedpoint impedance is 100 ohms at parallel resonance.

At HF, the losses in the stub are significant, and for practical purposes, proportional to the feedpoint voltage squared. The feedpoint voltage is minimum at the 1/2 wl resonant frequency of the dipole and increases as the frequency is increased or decreased. Therefore, the stub losses increase on either side of resonance.

bart
wb6hqk

1978. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C0EB71.64859D6@oio.net>
Source record: 180822

W4JLE wrote:
>
> I am not sure I understand your statement. How does the efficiency decrease?
>
> --
>
> Fred W4JLE
> http://w4jle.com/

Fred,
See trhe ARRL "Antenna Compendium", vol 2, 1989. They explain it
much better than I do.
'Doc

1979. NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <a26w5.14130$6f1.580436@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180823

I now have the MI2 Fractal Loop modeled in NEC4. The geometry of the antenna was not too difficult to track down, it is available at www.fractenna.com and in a paper by Dr. Cohen entitled "Fractal Loops and the Small Loop Approximation" published in Comm Quart - Winter 1996. Given the method used to enter the wire point coordinates, I believe that the point coordinates are accurate within 0.0014 wavelengths. I will be pleased to e-mail a GIF picture of the antenna or the NEC file to anyone wanting to see it.

The antenna geometry consists of 100 wires, each having 3 segments for a total of 300 segments in the model.

Preliminary results calculate the first resonance to have a resistance of 27.9 ohms which is pretty consistent with the 26 ohm figure presented in the referenced paper. Note that Dr. Cohen used EZNEC and not NEC4 to calculate antenna performance. Note also that the wire diameter chosen in the model does impact the results slightly.

I am in the process of comparing performance of this antenna to a variety of non-fractal designs and will post results when available.

More to follow ....

73,
Steve, VE9SRB

1980. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C0EB24.AC3A20DC@bigfoot.com>
Source record: 180824

W4JLE wrote:
> I am not sure I understand your statement. How does the efficiency decrease?

Quoting the ARRL Antenna Book, "Notice, however, that the efficiency of
of the (Bazooka) antenna drops to about 80% at the 2:1 SWR points. This
amounts to a loss of approximately 1 dB. The broadbanding, in part, is
caused by the resistive losses in the coaxial resonator stubs, which
have a remarkably low Q (only 20)."
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

1981. Separation of Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: jacobsen@win.BRight.NET
Message-ID: <39C0EE52.B0E25E2@win.bright.net>
Source record: 180825

We want to install a pair of yagi antennas on a tower to full duplex link 3 repeaters. I was told that the pairs must not be placed near each other. Is this correct? The two frequency pairs are 445.750 and 440.750; and 446.925 and 441.925. On the tower with the yagi pair they will be up 200feet, and on the other two towers with single yagis, they will be about 100 feet up. Your help would be appreciated. Ed

--
Ed Jacobsen
4900 Dake Road
Webster WI 548993, USA
KB9KJE
(715) 349 2761

1982. Re: Is someone selling fractal antennas???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C0EC96.AE77A55@oio.net>
Source record: 180826

Gunner Dave wrote:
>
> I this as effective as the aluminum foil head cover?
> Dave Kc6old
>

Yes, but not near as 'chic'!
'Doc

1983. Re: Flag pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Steve Giron <sgironx@home.com>
Message-ID: <0g6w5.25248$qM3.162106@news1.bnapk1.occa.home.com>
Source record: 180827

HF or VHF?

"Kubwa" <Richard@reliable-net.net> wrote in message
news:ss1crhu1ct681@corp.supernews.com...
> Yes....now that I have (permission) to put in a flag pole
> I would like any/all the info I can get for making the best
> darn (vertical) antenna possible,,,the first time.
> Thanks
> Richard
>
>

1984. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39c9f0ec.85841213@news.seanet.com>
Source record: 180828

On Wed, 13 Sep 2000 22:19:38 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"What one fool can do, another can."
>
>The little red book was fun to read. Instead of saying, we`re going to
>initiate an investigation of differentiation through the delta process,
>the author simply says, were going to take a little bit of x and a
>little bit of y and---. I remember thinking, now that`s the way to write
>instructions! I`d like to find and read that little book again.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

It sounds like Sylvanus' style. He loved to deflate pretense. Every problem of calculus was handled with is native simplicity rather than the academic fog of boastful phd's.

The cover is paper (it is a paper back only 30-some years old), but is a reprint from the 1912(?) edition. The book is quite thin for the topic and coverage with something like 150 pages. About the size of a paperback murder mystery.

I have volumes of calculus that span significantly more pages, and certainly go to greater depth - and yet none could teach with such simplicity.

73's
Richard Clark, KB7QHC

1985. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8pqt09$119$1@nnrp1.deja.com>
Source record: 180829

Steve,
Thanks for performing this yeoman duty and providing this to the ham radio community with no strings attached.
I look forward to seeing the GIF and the NEC4 files as NEC4 is my preferred modeling tool at present, yes I am trying Roy's great Windows product and I am beginning to like it.

Again Thanks.
Looking forward for the comparison information as well.

--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?

In article <a26w5.14130$6f1.580436@bgtnsc05-news.ops.worldnet.att.net>, "VE9SRB" <srbest@worldnet.att.net> wrote:
> I now have the MI2 Fractal Loop modeled in NEC4. The geometry of the
> antenna was not too difficult to track down, it is available at
> www.fractenna.com and in a paper by Dr. Cohen entitled "Fractal Loops and
> the Small Loop Approximation" published in Comm Quart - Winter 1996. Given
> the method used to enter the wire point coordinates, I believe that the
> point coordinates are accurate within 0.0014 wavelengths. I will be pleased
> to e-mail a GIF picture of the antenna or the NEC file to anyone wanting to
> see it.
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> total of 300 segments in the model.
>
> Preliminary results calculate the first resonance to have a resistance of
> 27.9 ohms which is pretty consistent with the 26 ohm figure presented in the
> referenced paper. Note that Dr. Cohen used EZNEC and not NEC4 to calculate

> antenna performance. Note also that the wire diameter chosen in the
model
> does impact the results slightly.
>
> I am in the process of comparing performance of this antenna to a
variety of
> non-fractal designs and will post results when available.
>
> More to follow ....
>
> 73,
> Steve, VE9SRB
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

1986. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39c0ea89.6840766@news.mcn.org>
Source record: 180830

Yes, and tree climbing spikes are of different length depending upon
the type of tree. For example spikes used on redwood trees are much
longer than those use when climbing fir trees.

Danny, K6MHE

On Wed, 13 Sep 2000 22:37:49 -0400, "Bill" <bill@hovac.com> wrote:

>Roger that! The spikes for climbing trees are longer than pole spikes.
>
>Bill
>
>"K1BQT" <k1bqt@aol.com> wrote in message
>news:20000912133355.13269.00000101@ng-cu1.aol.com...
>> Never attempt to climb a pine tree with lineman pole spikes, either. Did
>it as
>> a teenager, and my private parts are still up where my belly button
>belongs!
>>
>> Rick K1BQT
>

1987. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C10144.776E9189@haertig.com>
Source record: 180831

Bart Rowlett wrote:

>
> How did you derive the surge impedance from the data? The surge
> impedance is complex (Zo = sqrt((R+jwl) / (G+jwC)) of course, but
> tricky to estimate accurately from input impedance measurements. The
> technique described above only works well if the transmission line has
> low distortion (R/jwl approximately equal to G/jwC) over the frequency
> range in question.
>
> bart
> wb6hqk

Surge impedance can be determined fairly accurately by measuring the
input impedance of the line with the other end shorted and then open.

Zo = Sqrt(Zopen*Zshort)

I believe this is true for all types of lines and dielectrics and isn't
based on the simplification provided by assuming R/jwL approx= G/jwC.

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1988. Need Info on MOD ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: hjm@totcon.com
Message-ID: <39c0fcce.6677306@news.totcon.com>
Source record: 180832

I have a Mosley TA-33 Jr. (10, 15, and 20m) that I would like to cut down the 20m to 17m. Does anyone have the info on how much to remove (cut) off each of the three element ??

Thanks Hj

1989. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39caf4b9.86814162@news.seanet.com>
Source record: 180833

On Thu, 14 Sep 2000 15:07:55 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>Bill:
>
>I just thought I would add a more correct generalization to one of the
>statements made in this post:
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000914070530.09407.00000300@ng-ff1.aol.com...
>>
>>
>> For fractal antennas, the L and C are very much determined by the
>geometrical
>> shape of the antenna in a given form factor. Thus a given frequency or
>> resonance is degenerate: it can be attained by several different fractal
>shapes
>> and iterations in this context. For a particular resonance.
>>
>
>In my opinion, this statement would read more correctly if it were written
>more generally as follows:
>
>For all antennas, the L and C are a function of the geometrical shape of the
>antenna within a given form factor. A given resonant frequency or resonance
>can be attained by many different fractal or non-fractal shapes with this
>form factor. Additionally, the length of wire used to create any given
>shape is critical in determining the resonant frequency or resonance of the
>structure.
>
>73,
>Steve VE9SRB
>

Hi Steve,

At the bottom of my page:
http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Wire%20Comparisons.htm
you will find my attempts to reduce both the form of the fractal, its
iteration, and the wire consumed in its construction into a formula
for determining the resonance of the antenna. I call it a "special
formula" in that it lacks the generality to provide coverage for all
iterations for any particular form.

Many who approach fractals are typically overwhelmed by the artistic representations of graphic artists. My first assumption was that perhaps there was some magical quality worth discovering in the ultimate fractal form. My studies reveal that the correlation between the fractal form and resonance is more pedestrian, relating to simple and obvious geometrical considerations. This, of course, simply restates what you observe above.

I illustrate this at the same page in the table of comparisons that lie just above the formulas offered. Here I order the various fractal forms and illustrate correlations between my orderings and their performance in relation to resonance. This may be observed in the column appropriately named "ordering factor."

This table is a reduction of the work of the surveys which in turn were the reduction of some several hundred pages of data. All data is, of course, freely available for inspection and for those pages that have yet to include the EZNEC file, any correspondent may approach me for copies or encourage me to make them accessible on my page.

For the general readership,

My work on providing a practical constructible fractal antenna, as promised for last weekend, has slipped given the bulk of correspondence I've gotten in relation to these topics. I will make every attempt to at least publish the work in progress (the construction details are nearly finished).

73's
Richard Clark, KB7QHC

1990. Re: Incoirrect Unserstanding of a Fractal Antennal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39cbf8e5.87882738@news.seanet.com>
Source record: 180834

On Thu, 14 Sep 2000 08:59:05 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>Chip has some facts wrong- the stuff about the RLC circuits is fine- but
>what is the relationship, as applicable to fractal antennas?

Hi Bill,

I responded to this under Steve's posting with a similar Subject
heading (correctly spelled for one!). I hope to see you there in free
and undisturbed correspondence.

73's
Richard Clark, KB7QHC

1991. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39ccfadc.88385091@news.seanet.com>
Source record: 180835

On Thu, 14 Sep 2000 07:24:04 -0700, Martin Meserve
<meserve@my-deja.com> wrote:

>Robert Fanfant wrote:
>>
>> Would appreciate getting the algorithm/equation to calculate
>> SWR given separate forward and reverse voltages. Am in the
>> process of writing the software for a homebrew microprocessor
>> controlled auto-tuner. The coupler returns separate forward
>> and reverse voltages in the 0 to 5V range depending on SWR.
>> Plan to convert both voltages using an 8 bit, 8 channel A/D.
>>
>> For those that have done this before, are there any
>> suggestions for potential gotcha's????
>>
>
>Well, Roy gave you the formula:
>
>>Roy Lewallen wrote:
>>>
>>> SWR = (Vf + Vr) / (Vf - Vr)
>>>
>
>however, it's not going to be that simple. Just having
>the forward and reverse voltages is not enough information
>to intellegently control a transmission line tuner. Without
>phase information you won't be able to tell if you need
>more/less C or L. If your program was going to be strictly
>an itterative operation it could be done with minumum
>information, but it wouldn't be very elegant.
>
>What you are doing sounds like a fun project, however, I
>think you need to grab a book on transmission lines and
>antennas and give it a good read. Get a copy of the ARRL
>Antenna Handbook. It has a lot of good chapters on transmission
>lines, tuners, and antennas. It will give you a lot of insight
>into your development.
>
>Good luck on you project.
>
>Martin K7MEM

Hi Martin, Robert, Roy,

The problem may even go beyond the warnings you provide above. Tuning, through mechanistic or automated means, can fall into local minimas through a too narrow focus on parameters while missing the better match.

That is, the naive program may be satisfied with the settings of several matching elements at a 1.5:1 figure (a local minima) when another solution offers 1.1:1 (the best minima), but is not programmatically sought.

The difference between the two may be discarded for efficiency's sake (time to tune that is), and this issue of being captured in a local minima could easily be rationalized as a non-problem. But again, it is only an issue of software. And software is free isn't it?

73's
Richard Clark, KB7QHC

1992. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C0FEF8.89036298@mindspring.com>
Source record: 180836

Dan Richardson wrote:

> Yes, and tree climbing spikes are of different length depending upon
> the type of tree. For example spikes used on redwood trees are much
> longer than those use when climbing fir trees.
>
>

I have never seen or used any spikes except pole spikes but that seems backwards to me. Wouldn't you want longer spikes on softer wood for more stability? Does this make sense?

1993. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <5gPBOfVw3HYUfs8DKm6RD4RDB0Jx@4ax.com>
Source record: 180837

Roy Lewallen <w7el@eznec.com> wrote:

>Insulated wire is electrically just as good as bare wire for buried
>radials, and it does last a lot longer in most soils. I recommend using
>it.
>
>Roy Lewallen, W7EL

Dumb question, but is the purpose of buried radials to somehow
"electrically connect" to the ground, the dirt? If so, would insulated
wire work as well, since it is insulated from the dirt?

Bob
k5qwg
>
>bkizerian@my-deja.com wrote:
>>
>> No doubt this question has be discussed before, but I sure could use
>> the wisdom and experience of others.
>>
>> My question: What type of wire is best for buried radials? I want to
>> use something that will hold up for many years, if possible. Is
>> insulated wire okay? Seems to me it would deteriorate less than bare
>> wire.
>>
>> Thanks
>>
>> Bruce Kizerian
>> kk7zz
>>
>> Sent via Deja.com http://www.deja.com/
>> Before you buy.

1994. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C107FC.3FE8E21E@haertig.com>
Source record: 180838

As of this month, ALL FCC licensees are required to be in compliance
with the FCC RF exposure standard (which by and large is the same as the
ANSI standard of 1992).

I have never found a cellular phone site, wireless network, or STL that
was out of compliance with the standard (or within several orders of
magnitude of being out of compliance), and part of my practice is
concerned with determining such things. On rare occasions I have seen
point to point microwave or satellite up-links that fail to meet the standard.

In the past there were quite a number of FM and TV installations that
were ot of compliance, but most have been brought into compliance either
by making changes in the transmission system or by limiting the
possibility of human exposure.

RF heat sealing equipment has also been an exposure problem in the past,
but is rapidly improving as older machines are replaced. Since these
aren't licensed by the FCC, the FCC guidelines do not apply, but other
regulatory agencies have guidelines which are quite similar.

Gray

Will wrote:
>

> Most hams *already* are in compliance, and have been for years. Compare
> this to operators of cellular-phone systems, wireless networks,
> studio-transmitter links, and other fixed point-to-point and satellite
> installations in highly populated environments, not to mention
> cell-phones and other devices themselves, all of these operating well
> into the UHF-plus part of the spectrum. Many, many of these are woefuly
> far from compliance, as are a good number of FM broadcast and TV
> stations.
>

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1995. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Peter D.Richeson" <peter.d.richeson@boeing.com>
Message-ID: <39C0FFDD.C7B8A2F1@boeing.com>
Source record: 180839

I maintain a web sight for NEC. Send me the model and pix and I will
post it there. Please send it to NEC2@home.com The web page is
http://members.home.net/nec2

VE9SRB wrote:
>
> I now have the MI2 Fractal Loop modeled in NEC4. The geometry of the
> antenna was not too difficult to track down, it is available at
> www.fractenna.com and in a paper by Dr. Cohen entitled "Fractal Loops and
> the Small Loop Approximation" published in Comm Quart - Winter 1996. Given
> the method used to enter the wire point coordinates, I believe that the
> point coordinates are accurate within 0.0014 wavelengths. I will be pleased
> to e-mail a GIF picture of the antenna or the NEC file to anyone wanting to
> see it.
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> The antenna geometry consists of 100 wires, each having 3 segments for a
> total of 300 segments in the model.
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> Preliminary results calculate the first resonance to have a resistance of
> 27.9 ohms which is pretty consistent with the 26 ohm figure presented in the
> referenced paper. Note that Dr. Cohen used EZNEC and not NEC4 to calculate
> antenna performance. Note also that the wire diameter chosen in the model
> does impact the results slightly.
>
> I am in the process of comparing performance of this antenna to a variety of
> non-fractal designs and will post results when available.
>
> More to follow ....
>
> 73,
> Steve, VE9SRB

1996. Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C109D9.787DEAAB@oltraining.com>
Source record: 180840

I am considering building a single element quad antenna. The plane is to hang it like an inverted vee from the yard arm off the side of the tower and feed it with a 1:1 balun at the apex of the high point.

I am guessing that it will out perform my current inverted vee, have a strong horizontal component of radiation, and be a fairly quiet antenna to listen on.

I wonder, has anyone on in the newsgroup put up a single element quad and compared it to an inverted vee?

All responses appreciated.

Terry

--

Terrence R. Redding, Ph.D. | over 90 Computer Courses
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| Internet Services
http://www.oltraining.com | Web Broadcasting
| Web Site Design
(561) 357-0841 voice | Training Development
(561) 357-0842 FAX | Keynote Speaker
| SDL and Educational Research

1997. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C10A1F.9E936AF5@oltraining.com>
Source record: 180841

Okay, thanks for the info.

Terry

Fractenna wrote:

> >Hey guys. It's been several years since I read much here on the newsgroups.
> >What is the story on the hidden antenna? I am curious to know. Was there an
> >RFI
> >case as the result of a hidden antenna?
> >
> >Terry - W6LMJ
> >
>
> It was a histrionic exhortation by K3BU in rsgards to the Sept 1 compliance
> requirement.
>
> 73
> Chip N1IR

--

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| SDL and Educational Research

1998. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C10D2C.4FCC9BEB@haertig.com>
Source record: 180842

Shocks and burns are certainly a hazard around antennas - even without direct connection to the antenna.

This is seen quite often in LF and MF broadcast facilities. Picking up a 10' piece of rebar can produce a serious burn a few feet from a 20 KW AM radiator. In fact, compliance with contact current standards is much more of a problem than compliance with exposure standards at these frequencies. Burns and shocks around VHF and UHF antennas tend to occur less often because generally these antennas are several wavelengths away and people are not in the near field.

In the past, tower climbers have received shocks from tower members and hardware in the vicinity of operating FM and TV antennas. They have also reported breaking into a sweat when a nearby antenna was energized. There are also reports of skin burns (similar to sun burn) when riggers are in the main beam of operational microwave systems. There have been several people that have suffered severe health effects when grossly overexposed RF radiation. These include skin burns, hair loss, loss of salivary gland activity, and cataracts.

The source of the FCC exposure standards ultimately derives from thermal effects on the body. In a rather gross simplification of the actual process, laboratory animals were exposed to increasing levels of RF radiation until a change in behavior was noted. Using simulated tissue models, the Specific Absorption Rate (watts of energy absorbed per gram of tissue) was determined. The basic standard was set at one thousandth of this level.

The variations with frequency and some of the other parameters used in determining compliance are based on how well the body acts as an antenna and hence how well it absorbs energy from the ambient field.

Gray

"Ed Hare, W1RFI" wrote:
>
> Yuri Blanarovich <k3bu@aol.com> wrote:
>
> > Anybody has any stories about HF RF damaged hams or broadcast engineers
> (or
> > rats)? Lets hear some facts and not made up fairy tales.
>
> In my attending the IEEE "SCC-28" RF-safety standards committee, I have
> heard a few tales of actual shocks or RF burns being received by those who
> are working on energized towers. That is about the extent of it.
>

> I have heard NO reports of any health or other affects at levels at or below
> the standard. Perhaps that is one point in favor of the standard being set
> at an appropriate level. If there WERE stories about RF-damaged hams, that
> would be an indication that the standard is not set at a safe level.

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

1999. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39C10AD3.F64A9FA1@bellatlantic.net>
Source record: 180843

You said there is NO possibility of using insulators.
Therefore, put the antenna up with no insulators - or
don't put the antenna up at all.

You do not NEED insulators. Just like I don't NEED
a tower. Sure I'd like to have one, sure it would enable
me to use a nice beam, sure it would give me a better
signal etc. Sure, it would be better if you could put
up a bunch of properly designed, properly insulated
etc etc dipoles - but go with what you've got and ignore
the posters who choose to ignore what you said and insist
that you use insulators. I've used all kinds of antennas
in trees, both with and without insulators. They all work -
some work better than others, but I have noted no
evidence that my uninsulated, bare wire, "tree mounted"
antennas have performed any better/worse than insulated
"tree mounted" antennas.

hpmaxim@my-deja.com wrote:

> Hi All - Just moved to a new QTH with stringent restrictions. I can
> get a very long and fairly invisible wire up into the trees but there
> is NO possibility of using insulators to seperate it from the branches
> and leaves. Any suggestions??? Please reply to K2AKV@ARRL.net
> Many thanks 73 de Gene
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2000. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <V%7w5.6724$SN6.201893@news4.giganews.com>
Source record: 180844

I look at it this way: If the dirt was a good electrical conductor, one
wouldn't need the wire radials.

73 de Jack

Bob Miller wrote in message <5gPBOfVw3HYUfs8DKm6RD4RDB0Jx@4ax.com>...
>Roy Lewallen <w7el@eznec.com> wrote:
>
>>Insulated wire is electrically just as good as bare wire for buried
>>radials, and it does last a lot longer in most soils. I recommend using
>>it.
>>
>>Roy Lewallen, W7EL
>
>Dumb question, but is the purpose of buried radials to somehow
>"electrically connect" to the ground, the dirt? If so, would insulated
>wire work as well, since it is insulated from the dirt?
>
>Bob
>k5qwg
>>
>>bkizerian@my-deja.com wrote:
>>>
>>> No doubt this question has be discussed before, but I sure could use
>>> the wisdom and experience of others.
>>>
>>> My question: What type of wire is best for buried radials? I want to
>>> use something that will hold up for many years, if possible. Is
>>> insulated wire okay? Seems to me it would deteriorate less than bare
>>> wire.
>>>
>>> Thanks
>>>
>>> Bruce Kizerian
>>> kk7zz
>>>
>>> Sent via Deja.com http://www.deja.com/
>>> Before you buy.
>

2001. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <hs22ss44u9tth1e686q0fqkre6rtpukfdh@4ax.com>
Source record: 180845

Richard:

Thanks for this information, which Chip has been unwilling to publish.

I gather from these data that the antennas tested were not constructed
for operation on any particular band. (I may be wrong on this.)
Assuming I'm incorrect in this assumption, is it possible to construct
an antenna such as these for optimal use on a particular band,
sacrificing other bands' performance?

I guess what I'm asking is this: What is the benefit of constructing
such an antenna if you're only interested in certain bands, other than
wearing out a pair of needlenose pliers and using all the butane in
your soldering iron?

I'm not trying to be glib or curt, I'm just wondering what the real
advantages of these antennae are, aside from the size, if one is only
interested in a particular band or set of bands?

-SSB

On or about Thu, 14 Sep 2000 16:41:26 GMT, rwclark@seanet.com (Richard
Clark), using the forum rec.radio.amateur.antenna did say:

:On Thu, 14 Sep 2000 15:07:55 GMT, "VE9SRB" <srbest@worldnet.att.net>
:wrote:
:
:>Bill:
:>
:>I just thought I would add a more correct generalization to one of the
:>statements made in this post:
:>
:>"Fractenna" <fractenna@aol.com> wrote in message
:>news:20000914070530.09407.00000300@ng-ff1.aol.com...
:>>
:>>
:>> For fractal antennas, the L and C are very much determined by the
:>geometrical
:>> shape of the antenna in a given form factor. Thus a given frequency or
:>> resonance is degenerate: it can be attained by several different fractal
:>shapes
:>> and iterations in this context. For a particular resonance.
:>>
:>
:>In my opinion, this statement would read more correctly if it were written
:>more generally as follows:

:>
:>For all antennas, the L and C are a function of the geometrical shape of the
:>antenna within a given form factor. A given resonant frequency or resonance
:>can be attained by many different fractal or non-fractal shapes with this
:>form factor. Additionally, the length of wire used to create any given
:>shape is critical in determining the resonant frequency or resonance of the
:>structure.
:>
:>73,
:>Steve VE9SRB
:>
:
:Hi Steve,
:
:At the bottom of my page:
:http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Wire%20Comparisons.htm
:you will find my attempts to reduce both the form of the fractal, its
:iteration, and the wire consumed in its construction into a formula
:for determining the resonance of the antenna. I call it a "special
:formula" in that it lacks the generality to provide coverage for all
:iterations for any particular form.
:
:Many who approach fractals are typically overwhelmed by the artistic
:representations of graphic artists. My first assumption was that
:perhaps there was some magical quality worth discovering in the
:ultimate fractal form. My studies reveal that the correlation between
:the fractal form and resonance is more pedestrian, relating to simple
:and obvious geometrical considerations. This, of course, simply
:restates what you observe above.
:
:I illustrate this at the same page in the table of comparisons that
:lie just above the formulas offered. Here I order the various fractal
:forms and illustrate correlations between my orderings and their
:performance in relation to resonance. This may be observed in the
:column appropriately named "ordering factor."
:
:This table is a reduction of the work of the surveys which in turn
:were the reduction of some several hundred pages of data. All data
:is, of course, freely available for inspection and for those pages
:that have yet to include the EZNEC file, any correspondent may
:approach me for copies or encourage me to make them accessible on my
:page.
:
:For the general readership,
:
:My work on providing a practical constructible fractal antenna, as
:promised for last weekend, has slipped given the bulk of
:correspondence I've gotten in relation to these topics. I will make
:every attempt to at least publish the work in progress (the
:construction details are nearly finished).

:
:73's
:Richard Clark, KB7QHC

2002. Re: looking for velocity factor

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <39C10ED4.C79770DE@west.raytheon.com>
Source record: 180846

Hi Gray,

Gray Frierson Haertig wrote:
>
> Bart Rowlett wrote:
>
> > How did you derive the surge impedance from the data? The surge
> > impedance is complex (Zo = sqrt((R+jwl) / (G+jwC)) of course, but
> > tricky to estimate accurately from input impedance measurements. The
> > technique described above only works well if the transmission line has
> > low distortion (R/jwl approximately equal to G/jwC) over the frequency
> > range in question.
> >
> Surge impedance can be determined fairly accurately by measuring the
> input impedance of the line with the other end shorted and then open.
>
> Zo = Sqrt(Zopen*Zshort)
>
> I believe this is true for all types of lines and dielectrics and isn't
> based on the simplification provided by assuming R/jwL approx= G/jwC.

My previous post was based on the assumption that Zo was not
necessarily constant throughout the length of the transmission line or
independent of frequency.

In the case of constant Zo:

Zoc = Zo * coth(gamma * x) and
Zsc = Zo * tanh(gamma * x) where

Zoc is the input impedance to the transmission line in ohms with the
far end open
Zsc is the input impedance to the transmission line in ohms with the
far end shorted
Zo is the characteristic impedance (complex) of the transmission line
at the test frequency in ohms
gamma = alpha + j beta is the propagation constant (per meter)
x is the transmission line length in meters

Since coth(gamma * x) * tanh(gamma * x) = 1, Zo = sqrt(Zoc * Zsc)
independent of gamma or x as long as Zo is constant.

At low frequencies where R/jwL >> G/jwC, Zo varies significantly with
frequency.

bart
wb6hqk

2003. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Boatanchor Bob NA4G <na4g@weedcon3.cropsci.ncsu.edu>
Message-ID: <8pqqlb$k52$1@uni00nw.unity.ncsu.edu>
Source record: 180847

Roy Lewallen <w7el@eznec.com> wrote:
> I was considering the properties of the radials only for an RF ground,
> not for lightining protection. I imagine the radial system requirements
> for lightning protection are somewhat different. Hopefully someone will
> spell them out. That's a topic I'm certainly no expert at.

I am no expert, but the Nat. Elec. Code spells out the particulars.

Anyway, for consideration, what is the electrical voltage breakdown of
the average insulated wire we would be likely to use as radials (1kv),
and what effect would that be to a lightning strike.....(none).
Basically a not to worry situation. Lightning potentials would consider
the wire insulation a non-entity, for all practical purposes. Even the
HV RF at the end of the radials would consider it a non-entity at any
power of more than 100 watts or so.

Bob/NA4G

2004. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <5d8w5.652$u95.1942628@news.ntplx.net>
Source record: 180848

rattlehead@my-deja.com wrote:

> so my question is this: I KNOW that the verticals can't perform as well
> as the dipoles and V's on HF, but do they work well enough to give them
> a try? or should I just bite the bullet and put up a dipole or V and
> just use a tuner to solve the SWR problems?

If you follow the history of this thread, you can get back to the reports that his verticals, with an excellent radial system over what he believes would be poor ground, seem to perform a bit better than his dipole at >300 feet above ground, on 1.8 MHz.

If you can get a horizontally polarized antenna up about a half-wave, it will be a pretty decent DX antenna. But don't discount that vertical, especially if you are over a good ground (pastoral farmland, for example). And the bottom line is that, for some, they simply don't have the real estate or height to put up an effective antenna, so going vertical and improving the ground connection as much as possible may be the only practical alternative. For DX, I would definately choose a vertical, even with a poor ground, over a low horizontal antenna for DX. On the lower bands, ie 80M, a low horizontal antenna will be better for communications of a few hundred miles most of the time.

73,
Ed Hare, W1RFI

2005. Re: 2m/70cm Base Antenna Comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000914135034.10294.00000213@ng-fc1.aol.com>
Source record: 180849

>I live in a deep canyon and could use some more gain than my existing
>discone just to hit the local repeaters.

You may need an antenna with a higher angle of radiation to get out of the canyon, like maybe a 1/4 wave ground plane.

The gain of a Yagi might also be helpful. May have to point it up toward the top of the canyon.

73 Al Lowe N0IMW

2006. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C1156D.DDB06E8F@eznec.com>
Source record: 180850

Makes sense to me. Redwood is very soft. Douglas fir, which I understand isn't really a true fir, is much harder and more dense. I don't know about true firs like Grand or White fir, but I'd be pretty sure they're harder than redwood, too.

Roy Lewallen, W7EL

sideband@mindspring.com wrote:
>
> Dan Richardson wrote:
>
> > Yes, and tree climbing spikes are of different length depending upon
> > the type of tree. For example spikes used on redwood trees are much
> > longer than those use when climbing fir trees.
> >
> >
>
> I have never seen or used any spikes except pole spikes but that seems backwards
> to me. Wouldn't you want longer spikes on softer wood for more stability? Does
> this make sense?

2007. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C11452.BA8377CB@hiwaay.net>
Source record: 180851

Steve- your statement is certainly more concise. The point that is not made in any fractal write-up, is, that for any given iteration level of any given fractal form, the process parallels the recent "Zen Archery" series- you have to make one- then measure it, then adjust it.
(By "make" , I will cocede that the modellers, such as EZNEC, are a pretty good substitute, up to a point)

Bill-W4BSG

VE9SRB wrote:
>
> Bill:
>
> I just thought I would add a more correct generalization to one of the
> statements made in this post:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000914070530.09407.00000300@ng-ff1.aol.com...
> >
> >
> > For fractal antennas, the L and C are very much determined by the
> geometrical
> > shape of the antenna in a given form factor. Thus a given frequency or
> > resonance is degenerate: it can be attained by several different fractal
> shapes
> > and iterations in this context. For a particular resonance.
> >
>
> In my opinion, this statement would read more correctly if it were written
> more generally as follows:
>
> For all antennas, the L and C are a function of the geometrical shape of the
> antenna within a given form factor. A given resonant frequency or resonance
> can be attained by many different fractal or non-fractal shapes with this
> form factor. Additionally, the length of wire used to create any given
> shape is critical in determining the resonant frequency or resonance of the
> structure.
>
> 73,
> Steve VE9SRB

2008. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C115F1.5AF54B8D@eznec.com>
Source record: 180852

Richard Clark wrote:

> . . .
> But again, it
> is only an issue of software. And software is free isn't it?

Only to the extent that time is free.

Roy Lewallen, W7EL

2009. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C1138D.740E7853@oio.net>
Source record: 180853

Bart,
I'm aware of what a 'double' bazooka antenna is, but what's
a 'single' bazooka???
'Doc

2010. Re: Beta Testers for FRACTopper(TM) Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C113E9.168486A@oio.net>
Source record: 180854

Frac,
Thanks, no thanks, I'll pass!
'Doc

2011. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C1177D.45725A67@eznec.com>
Source record: 180855

The purpose of radials isn't to connect to the ground. The purpose is to lower the resistance of the path which currents take on their way to and from the antenna. You can actually improve the efficiency of the antenna (that is, lower the resistance of the path) by elevating the radials above the ground, in which case there's no contact at all between the wires and the ground. With an elevated system, the incoming or outgoing field interacts directly with the radial wires. The insulation is transparent to the fields, so it doesn't make any difference (except for a slight lengthening effect). This direct interaction also occurs when the radials are on or under the ground. The coupling to the currents in the ground itself is primarily inductive and capacitive, rather than conductive and due to direct contact. This coupling is just as effective if the wires are insulated as if they're not.

Roy Lewallen, W7EL

Bob Miller wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
>
> >Insulated wire is electrically just as good as bare wire for buried
> >radials, and it does last a lot longer in most soils. I recommend using
> >it.
> >
> >Roy Lewallen, W7EL
>
> Dumb question, but is the purpose of buried radials to somehow
> "electrically connect" to the ground, the dirt? If so, would insulated
> wire work as well, since it is insulated from the dirt?
>
> Bob
> k5qwg

2012. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <39C1195D.6E52BA06@haertig.com>
Source record: 180856

You should take a look at NEC (National Electrical Code). A rebar ground
of at least 20 feet is the PREFERRED method of grounding a service
entrance, and REQUIRED on new construction where applicable.

This type of ground is usually called a Ufer ground. It might not be
applicable on some tower foundations because of a limited ground contact
area, but properly designed will have a much lower resistance than a
ground rod ground. There should be a good contact between the tower
base and the rebar cage, and it helps if the rebar cage is well tied together.

Gray

'Doc wrote:
>
> CAM wrote:
> >
> > Fractenna wrote:
> > > Say Cecil--that couldn't be in Texas: from what I hear its like the sunny side
> > > of the moon there now:-(
> >
> > It's actually in Chandler, AZ. When N5AQM had his pool put in, he
> > tied his lightning protection, tower, and ground plane into the pool
> > rebar matrix. He even puts out a pretty good 160m signal from a
> > small city lot using a sloper off his tower.
> > --
> > 73, Cecil, W6RCA http://www.mindspring.com/~w6rca
>
> Using any metal running through concrete as a ground for lightning
> is just asking for trouble. Concrete and electricity do ~not~ mix
> well.
> Depending on the moisture content of the concrete, you can get a
> fairly
> decent sized steam explosion. Take a look at a few commercial towers.
> None of them will be grounded through the concrete pier, the ground
> connection is above the concrete. N5AQM has been lucky!
> 'Doc

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

2013. Re: Incoirrect Unserstanding of a Fractal Antennal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C116AB.859275@hiwaay.net>
Source record: 180857

Richard- I have gotten SO much from you, that I am up to my ears in the possibilities. I have recommended your site to others (Steve included).

Free exchange IS refreshing, for a change.

Bill-W4BSG

Richard Clark wrote:
>
> On Thu, 14 Sep 2000 08:59:05 -0500, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >Chip has some facts wrong- the stuff about the RLC circuits is fine- but
> >what is the relationship, as applicable to fractal antennas?
>
> Hi Bill,
>
> I responded to this under Steve's posting with a similar Subject
> heading (correctly spelled for one!). I hope to see you there in free
> and undisturbed correspondence.
>
> 73's
> Richard Clark, KB7QHC

2014. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8pr68m$d3v$1@nnrp1.deja.com>
Source record: 180858

Richard,
Sorry to read that the bulk has swamped you, I do understand
that it only you at the keyboard and that you do not have a multitude
of staff to handle the correspondence.
I am glad to see that you are back on track for publishing the work in
progress, it is awaited with baited breath.
I concur that it is high time that a practical constructible
fractal antenna be put forth to the ham radio community for
verification of applicability to the hobby.

I can almost taste the snow coming in the air and I do not want to
run into conflicting results as a result of snowflake contamination.

Glad to see that you are back on track.
--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?

In article <39caf4b9.86814162@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Thu, 14 Sep 2000 15:07:55 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:

SNIP
>
> For the general readership,
>
> My work on providing a practical constructible fractal antenna, as
> promised for last weekend, has slipped given the bulk of
> correspondence I've gotten in relation to these topics. I will make
> every attempt to at least publish the work in progress (the
> construction details are nearly finished).
>
> 73's
> Richard Clark, KB7QHC
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2015. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C1197A.F69F10B7@eznec.com>
Source record: 180859

VE9SRB wrote:

> . . .
> Note that Dr. Cohen used EZNEC and not NEC4 to calculate
> antenna performance. . .

He uses EZNEC/4, which includes an NEC-4 calculating engine. (It can also be used with an external NEC-4 calculating engine, although to my knowledge no EZNEC/4 users are doing this.) I have seen no case where EZNEC/4 gives a different result than other formulations of NEC-4, and would be extremely interested if one is ever discovered.

But I'd be very surprised to find any significant difference between NEC-2 and NEC-4 results in modeling any fractal antenna. If anyone observes a difference, I'd really appreciate your letting me know, and sending me the NEC or EZNEC file. If a difference is seen, it's likely that NEC-2 is being pushed to the edge of its ability in some respect. NEC-4 holds in for a little longer at the fringes. (For example, NEC-4 will handle loops which are a bit smaller before giving bogus answers.)

Roy Lewallen, W7EL

2016. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <yO8w5.14546$6f1.590470@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180860

"Richard Clark" <rwclark@seanet.com> wrote in message
news:39caf4b9.86814162@news.seanet.com...
>
> Hi Steve,
>
> At the bottom of my page:
>
http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Wire%20Comparisons.htm
> you will find my attempts to reduce both the form of the fractal, its
> iteration, and the wire consumed in its construction into a formula
> for determining the resonance of the antenna. I call it a "special
> formula" in that it lacks the generality to provide coverage for all
> iterations for any particular form.

Hi Richard:

Your web site presents a wealth of information. Great work.

>
> Many who approach fractals are typically overwhelmed by the artistic
> representations of graphic artists. My first assumption was that
> perhaps there was some magical quality worth discovering in the
> ultimate fractal form. My studies reveal that the correlation between
> the fractal form and resonance is more pedestrian, relating to simple
> and obvious geometrical considerations. This, of course, simply
> restates what you observe above.
>

I would agree. They do look neat though.

> I illustrate this at the same page in the table of comparisons that
> lie just above the formulas offered. Here I order the various fractal
> forms and illustrate correlations between my orderings and their
> performance in relation to resonance. This may be observed in the
> column appropriately named "ordering factor."
>
>
> This table is a reduction of the work of the surveys which in turn
> were the reduction of some several hundred pages of data. All data
> is, of course, freely available for inspection and for those pages
> that have yet to include the EZNEC file, any correspondent may
> approach me for copies or encourage me to make them accessible on my
> page.
>
> For the general readership,
>

> My work on providing a practical constructible fractal antenna, as
> promised for last weekend, has slipped given the bulk of
> correspondence I've gotten in relation to these topics. I will make
> every attempt to at least publish the work in progress (the
> construction details are nearly finished).
>
> 73's
> Richard Clark, KB7QHC

Still digesting all the information. Thanks.

73,
Steve, VE9SRB

2017. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <IQ8w5.14547$6f1.590609@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180861

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39C1197A.F69F10B7@eznec.com...
> VE9SRB wrote:
>
> > . . .
> > Note that Dr. Cohen used EZNEC and not NEC4 to calculate
> > antenna performance. . .
>
> He uses EZNEC/4, which includes an NEC-4 calculating engine. (It can
> also be used with an external NEC-4 calculating engine, although to my
> knowledge no EZNEC/4 users are doing this.) I have seen no case where
> EZNEC/4 gives a different result than other formulations of NEC-4, and
> would be extremely interested if one is ever discovered.
>
> But I'd be very surprised to find any significant difference between
> NEC-2 and NEC-4 results in modeling any fractal antenna. If anyone
> observes a difference, I'd really appreciate your letting me know, and
> sending me the NEC or EZNEC file. If a difference is seen, it's likely
> that NEC-2 is being pushed to the edge of its ability in some respect.
> NEC-4 holds in for a little longer at the fringes. (For example, NEC-4
> will handle loops which are a bit smaller before giving bogus answers.)
>
> Roy Lewallen, W7EL

Roy,

Thanks for the clarification on this.

Steve, VE9SRB

2018. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C11AF4.9D7559DF@eznec.com>
Source record: 180862

This would be an easy comparison to make with models, and modeling would provide some insight into how it works. The free EZNEC demo available from http://eznec.com would easily handle this.

Roy Lewallen, W7EL

(I'm not impartial: EZNEC is a product I sell.)

"Terrence R. Redding, Ph.D." wrote:
>
> I am considering building a single element quad antenna. The plane is
> to hang it like an inverted vee from the yard arm off the side of the
> tower and feed it with a 1:1 balun at the apex of the high point.
>
> I am guessing that it will out perform my current inverted vee, have a
> strong horizontal component of radiation, and be a fairly quiet antenna
> to listen on.
>
> I wonder, has anyone on in the newsgroup put up a single element quad
> and compared it to an inverted vee?
>
> All responses appreciated.
>
> Terry
>
> --
> -----------
> Terrence R. Redding, Ph.D. | over 90 Computer Courses
> President/CEO | GED Courses
> OnLine Training, Inc. | Insurance Agent Licensing
> | Internet Services
> http://www.oltraining.com | Web Broadcasting
> | Web Site Design
> (561) 357-0841 voice | Training Development
> (561) 357-0842 FAX | Keynote Speaker
> | SDL and Educational Research

2019. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <uY8w5.14552$6f1.589772@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180863

Just some preliminary results on my NEC4 MI2 Fractal Loop as compared to the work presented by Dr. Cohen:. This is presented to validate the NEC4 model

NEC4 Model Dr.
Cohen's Papers

Resonant Impedance: 27.9 ohms 25 - 26 ohms

2:1 SWR Bandwidth 1.15% 2%
wrt 50 ohms

Directivity: 2.18 dBi 2
dBi

Note that radiation efficiency is not presented because it is simply a function of the ohmic losses in the wire. In all cases, the efficiency will be the ratio of radiation resistance to total feedpoint resistance.

The slight differences between the NEC4 calculated values and those presented in Dr. Cohen's papers are not significant in the comparisons to be presented since I will be comparing different wire geometries under the same conditions.

More to follow ...

73,
Steve, VE9SRB

2020. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <39c11bf7@news.microsoft.com>
Source record: 180864

"Richard Clark" <rwclark@seanet.com> wrote in message
news:39ccfadc.88385091@news.seanet.com...
> On Thu, 14 Sep 2000 07:24:04 -0700, Martin Meserve
> <meserve@my-deja.com> wrote:
>
> >Robert Fanfant wrote:
> >>
> >> Would appreciate getting the algorithm/equation to calculate
> >> SWR given separate forward and reverse voltages. Am in the
> >> process of writing the software for a homebrew microprocessor
> >> controlled auto-tuner. The coupler returns separate forward
> >> and reverse voltages in the 0 to 5V range depending on SWR.
> >> Plan to convert both voltages using an 8 bit, 8 channel A/D.
> >>
> >> For those that have done this before, are there any
> >> suggestions for potential gotcha's????
> >>
> >
> >Well, Roy gave you the formula:
> >
> >>Roy Lewallen wrote:
> >>>
> >>> SWR = (Vf + Vr) / (Vf - Vr)
> >>>
> >
> >however, it's not going to be that simple. Just having
> >the forward and reverse voltages is not enough information
> >to intellegently control a transmission line tuner. Without
> >phase information you won't be able to tell if you need
> >more/less C or L. If your program was going to be strictly
> >an itterative operation it could be done with minumum
> >information, but it wouldn't be very elegant.
> >
> >What you are doing sounds like a fun project, however, I
> >think you need to grab a book on transmission lines and
> >antennas and give it a good read. Get a copy of the ARRL
> >Antenna Handbook. It has a lot of good chapters on transmission
> >lines, tuners, and antennas. It will give you a lot of insight
> >into your development.
> >
> >Good luck on you project.
> >
> >Martin K7MEM
>

> Hi Martin, Robert, Roy,
>
> The problem may even go beyond the warnings you provide above.
> Tuning, through mechanistic or automated means, can fall into local
> minimas through a too narrow focus on parameters while missing the
> better match.
>
> That is, the naive program may be satisfied with the settings of
> several matching elements at a 1.5:1 figure (a local minima) when
> another solution offers 1.1:1 (the best minima), but is not
> programmatically sought.
>
> The difference between the two may be discarded for efficiency's sake
> (time to tune that is), and this issue of being captured in a local
> minima could easily be rationalized as a non-problem. But again, it
> is only an issue of software. And software is free isn't it?
>
> 73's
> Richard Clark, KB7QHC

Hi Roy, Martin, Richard,

I've implemented a Pi network with the Caps & Ind driven by stepper motors. This design includes a phase detector and band switch detection. Problem is that I'm not quite sure what to do with the phase detector :-).

For example if the phase detector tells me that I need more C, what do I do, decrease L or increase C? If I increase C, which of the 2 caps do I increase ? Etc...

The software will remember the absolute locations for a 1:1 match by band, so when band switches occur, the software will automatically position the Caps & Ind to the last tuned postion for that band, then start tuning at that position for minimum SWR.

What would really be nice is if someone has a flow chart (i.e. steps) for tuning a Pi network given the SWR and phase (i.e. whose output state is to either Increase/decrease L or C, OR its a perfect match).

-rob

2021. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C11DEF.9D7A4698@uci.edu>
Source record: 180865

Fractenna wrote:

> >>See
> >>
> >>http://www.fractenna.com

> Again, the site is:
>
> http://www.fractenna.com

Does Fractenna do any paid advertising?

2022. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39ce10c0.93989639@news.seanet.com>
Source record: 180866

On Thu, 14 Sep 2000 13:43:07 -0400, sideband <sideband@cac.net> wrote:

>Richard:
>
>Thanks for this information, which Chip has been unwilling to publish.
>
>I gather from these data that the antennas tested were not constructed
>for operation on any particular band. (I may be wrong on this.)
>Assuming I'm incorrect in this assumption, is it possible to construct
>an antenna such as these for optimal use on a particular band,
>sacrificing other bands' performance?
>
>I guess what I'm asking is this: What is the benefit of constructing
>such an antenna if you're only interested in certain bands, other than
>wearing out a pair of needlenose pliers and using all the butane in
>your soldering iron?
>
>I'm not trying to be glib or curt, I'm just wondering what the real
>advantages of these antennae are, aside from the size, if one is only
>interested in a particular band or set of bands?
>
>-SSB

Hi OM,

I found nothing offensive, curt, or glib about your reasonable
questions. I encourage any correspondent to participate in similar
manner.

As for your assumption:
>I gather from these data that the antennas tested were not constructed
>for operation on any particular band.
This is entirely correct.

My method was to ignore every consideration EXCEPT for wire length, or
antenna height. I held these constant for every variation of design
so that I could compare designs across all the various fractal forms.
As a consequence of this method, I let the characteristics speak for
themselves. Those characteristics revealed an ordering, and that
ordering reveals that the simpler geometrical characteristics strip
away the aura of magic from fractal.

There are no pluses there are no minuses, there is simply the
reporting of results of the variations made. There is no implication
of best, there is no implication of worst, such assessments are beyond
the scope of my surveys and they would be an inappropriate presumption

on my readers' and their needs. My intent is to remain neutral and anticipate nothing. (Yes, this can make for rather dry reading.)

This is not to say my pages are bereft of opinion or taking a stance. such writing is found in the side pages where I review designs that fall outside of my surveys. My practical design, soon to be published, is also a side publication. I hope it will satisfy the needs of those who wish to delve into this topic with wire and needle-nose pliers; but it remains a sidebar to my investigations.

Why do I characterize these as "side" issues? Because this is simply derivative work of discovery not work that reveals basics of design. I seek satisfaction in the latter path (which in fact makes this posting very ON TOPIC), but I acknowledge the need for practical and demonstrable designs so that our readers here can relate to real applications. However, this practical design being a sidebar, it runs the risk of not being a very good example of a fractal implementation. This may become evident to the readership after I publish.

I am not promising fractal dogs, but neither am I promising fractal saints. I can promise it will not be a Fragile Antenna.

To attend to your more specific question (a very good one):
>I'm just wondering what the real
>advantages of these antennae are, aside from the size, if one is only
>interested in a particular band or set of bands?

My interest is not with small fractals. They are largely one band focused as an optimization. The k2 and my review show how "advantages" are found (it also shows how the application of a fractal solution is a forced one and is not necessarily the best solution).

I find large fractals much more interesting, and in regard to your question, there may be more advantage found there. Of course the penalty is that you have a very large, complex structure. On the plus side, you also have a High Z extremely wide band antenna (on the plus only if you can cope with the High Z tho') and it shows gains in excess of 0 dBi (compare to the k2 being almost 5 dB down from 0 - but this comparing apples to road-apples... some might dispute which is sweeter).

returning to the first assumption:
>I gather from these data that the antennas tested were not constructed
>for operation on any particular band.
I consider it within the provence of an amateur to be able to successfully scale a design to any particular frequency (it is in fact extremely easy using EZNEC), provided of course, if they had reasonable access to the EZNEC file. This last assumption (mine) has always been supported by myself for all those who desire the file or the data.

Now this may all sound hi-handed, my writing style certainly lends itself to such a stigma. It does not mean I will repel you with "do

it yourself" because I realize that those who CAN do it for themselves are asking not for an answer, but for reassurance. This is not unreasonable either.

73's
Richard Clark, KB7QHC

p.s.
I hope it will come as a pleasant surprise that you will need neither pliers nor torch to build my design. A simple tape measure (metric) will be enough, insulated guy lines, and perhaps several dozen tie-wraps.
rwc

2023. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39cf1f23.97672766@news.seanet.com>
Source record: 180867

On Thu, 14 Sep 2000 10:38:51 -0700, Gray Frierson Haertig
<gfh@haertig.com> wrote:

>
>The source of the FCC exposure standards ultimately derives from thermal
>effects on the body. In a rather gross simplification of the actual
>process, laboratory animals were exposed to increasing levels of RF
>radiation until a change in behavior was noted. Using simulated tissue
>models, the Specific Absorption Rate (watts of energy absorbed per gram
>of tissue) was determined. The basic standard was set at one thousandth
>of this level.

Hi Gray,

This is true as far as it goes. There is further to go. RF over
exposure can also be experienced as a chill! This may seem
counter-intuitive, but the damage is there nonetheless.

73's
Richard Clark, KB7QHC

2024. Re: Beta Testers for FRACTopper(TM) Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C12208.BBDEB5AF@uci.edu>
Source record: 180868

Fractenna wrote:

> >What may be helpful, Chip, would be for you to outline the tests you want
> >performed and allow people who feel they can do them to do so.

> I did.

For those of us who can't read and are too stupid to know that you did,
would you mind posting it "again"? Or perhaps you weren't being sincere
in your effort to solicit beta testers. I have a Wavetek step
attenuator,
and a Butternut vertical to compare against.

ac6xg

2025. Re: Mixed Blessing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <39C08494.D55571F6@sccoast.net>
Source record: 180902
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

BD wrote:
>
> It's not going to harm coax and/or smaller elements?...

Heh. Heh. The odds of hitting the coax or smaller elements is a lot
smaller than hitting a small bird. Aim carefully.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

2026. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000914063447.09407.00000295@ng-ff1.aol.com>
Source record: 180903

>For an example... see the
>...instructions for setting up and operating your
>[fractal flyer].

I think hams SHOULD look at this. here's where to find it:

http://www.fractenna.com/ham/hampage6.html

73
Chip N1IR

2027. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C0A222.FAF5ADCA@oio.net>
Source record: 180904

Joe & Bonita,
I seriously doubt if your going to find an 'all-band'
double-bazooka antenna. They are made for a particular,
single band. Adding additional 'legs' for other bands
is going to create a ~very~ heavy antenna (if it'll work
at all).
What people forget, or don't know to start with, is that
while the SWR may be uniformly low across almost a whole
band, the efficiency of the antenna drops off as you get
further away from the center frequency. The SWR may still
be low at the band edge, but the antenna is much less efficient.
It sort of 'evens out', good SWR, but less output.
'Doc

2028. Re: Incoirrect Unserstanding of a Fractal Antennal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000914070530.09407.00000300@ng-ff1.aol.com>
Source record: 180905

>Troll
>There is no known relationship between the length of wire in a fractal
>antenna and the frequency at which it is resonant.
>
>This statement is true now, and has been true for the known past.
>
>Does anyone doubt this?
>
>Bill
>

I'm sure that there is no relation between the juiciness of an apple in August and the resonant frequency of a fractal antenna.

Antennas can be viewed as RLC circuits. Like all circuits, there are --or can be-- regions in the frequency spectrum where the the reactance goes to zero. Hence resonance is attained.

For fractal antennas, the L and C are very much determined by the geometrical shape of the antenna in a given form factor. Thus a given frequency or resonance is degenerate: it can be attained by several different fractal shapes and iterations in this context. For a particular resonance.

Hence to talk about the length of the wire and the resonant frequency is to indicate a profound absence of understanding as to what L and C are; what factors determine them; and so on.

There is no question that finding the equivalent circuit of a fractal antenna is a very difficult problem. That's not what Mr. Aycock is referring to, however.

Unfortunately Mr. Aycock has been banned from the below link, for re-posting a list- only offer(to provide a patent reprint) to a global, unrestricted USENET forum.

But others are welcome to the list:

fractalantenna-subscribe@egroups.com

is the place where such discussions may be fruitfully continued.

With Best Wishes,
Chip N1IR

2029. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000914071028.09407.00000301@ng-ff1.aol.com>
Source record: 180906

>>I don't know what a frektenna is, but your statement is correct with respect
>>to
>>fractal antennas. Our customers are OEM's--not end users.
>>
>>No retail.
>>
>>See
>>
>>http://www.fractenna.com
>>
>> for web site updates in the next week:!:-)
>>
>>73
>>Chip N1IR
>
>He has some real good antennas, just click on the link
>above.
>

Again, the site is:

http://www.fractenna.com

See the ham page for ham antenna info. This is non-commercial, the firm does
not sell ham antennas.

73
Chip N1IR

2030. Flag pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Kubwa <Richard@reliable-net.net>
Message-ID: <ss1crhu1ct681@corp.supernews.com>
Source record: 180907

Yes....now that I have (permission) to put in a flag pole
I would like any/all the info I can get for making the best
darn (vertical) antenna possible,,,the first time.
Thanks
Richard

2031. FS: Spi-Ro LS-80K antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: n7bhc@aep.org.al
Message-ID: <8pqe0dduk1@nnrp1.deja.com>
Source record: 180908

FS: Spi-Ro LS-80K shortened 80m dipole. Kit includes center insulator, wire, loading coils, and insulators. Have three kits, all new in the wrappers. $45 each

Dave N7BHC
n7bhc@aep.org.al

Sent via Deja.com http://www.deja.com/
Before you buy.

2032. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pqecp$428$1@iac5.navix.net>
Source record: 180909

I am not sure I understand your statement. How does the efficiency decrease?

--

Fred W4JLE
http://w4jle.com/

"'Doc" <w5lz@oio.net> wrote in message news:39C0A222.FAF5ADCA@oio.net...
>
>
> Joe & Bonita,
> I seriously doubt if your going to find an 'all-band'
> double-bazooka antenna. They are made for a particular,
> single band. Adding additional 'legs' for other bands
> is going to create a ~very~ heavy antenna (if it'll work
> at all).
> What people forget, or don't know to start with, is that
> while the SWR may be uniformly low across almost a whole
> band, the efficiency of the antenna drops off as you get
> further away from the center frequency. The SWR may still
> be low at the band edge, but the antenna is much less efficient.
> It sort of 'evens out', good SWR, but less output.
> 'Doc

2033. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000914075901.25484.00000313@ng-ci1.aol.com>
Source record: 180910

>
>I have the possibilty that I could drape some 1000 feet and maybe up to
>1000 metres of fine gauge (insulated or varnish covered ex transformer
>winding wire etc.) in some trees in a west east direction.
>One end would be on our propeerty and the other across some rough
>woodlands. There would be no prblem getting permission from the other
>owners.
>How straight I could do it is doubtful; also how high I could get it,
>maybe 10 feet? Also the land slopes from west to east, towards the
>coast, but is several kilometres from it. You get a clear view of the
>ocean horizon from our land.
>Frankly the wire wuldn't last very long! Maybe a few weeks, in summer?
>It would be possible to put a terminating resistor at the east end of
>the wire connected to some sort of ground rod.
>Obviously what I'm thinking about is a 'rough and ready' Beverage, with
>its end towards Europe; the terminating resistor idea being to
>attenuate/absorb signals from t'other direction i.e. eastern North
>America.
>Crazy idea maybe but comments anyone?
>Purpose to receive European broadcasting and long wave stations, but
>also 160 etc.
>Terry S. Torbay, east coast of Newfoundland, Canada.
>

You certainly can make a beverage. however, you'll need to keep the antenna as straight as you can for best f/b . An inch or two droop isn't a problem for a beverage, say, 10 feet off the ground. But a 3 or 4 foot droop is. Also, the performance will very much depend on the uniformity of the ground.

GL!

73
Chip N1IR

2034. Re: A Message to N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000914091955.15698.00000158@ng-cc1.aol.com>
Source record: 180911

>From: "Chuck O'Neal" coneal@ultranet.com

>BTW, fire your patent lawyer, (unless that is yourself) no patent
>lawyer in his right mind would have produced that drivel....

At $200.00 an hour, isn't drivel a patent attorney's friend? :-)

73,
Ed Hare, W1RFI

2035. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: "L.M.Preece" <mda03@keele.ac.uk>
Message-ID: <8pqiq7njk2@www1.kis.keele.ac.uk>
Source record: 180912

rattlehead@my-deja.com wrote:

> so my question is this: I KNOW that the verticals can't perform as well
> as the dipoles and V's on HF, but do they work well enough to give them
> a try? or should I just bite the bullet and put up a dipole or V and
> just use a tuner to solve the SWR problems?

Interesting that you think they don't perform as well - worked 100watts to a 20/15/10m vertical into Brazil, Turkey and Japan recently on 15 and 10m.

So - try one - its what the hobbies all about - experimentation and trial!

Leigh.....

(PS - arent Fractennas ugly?)
--
+ + + + + Leigh Preece + + Keele University, Staffordshire, UK + + + + +
+ + Email - Internet: leigh@media.keele.ac.uk + +
+ + Amateur Radio Callsign - M5GWH - IO83VA + +

2036. Re: Incoirrect Unserstanding of a Fractal Antennal

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C0D9A8.53ACFDA8@hiwaay.net>
Source record: 180913

Chip has some facts wrong- the stuff about the RLC circuits is fine- but
what is the relationship, as applicable to fractal antennas?
second- the reason he gives for the banishment is crap- the posting of
the offer of the EZNEC file was made by HIM, on this NG- How do you
suppose I found out about it? He was looking for an excuse, and picked
one that is a lie, and too easily checked by anyone who wants to.

I hope this is helpful.

Bill-W4BSG

Fractenna wrote:
>
> >Troll
> >There is no known relationship between the length of wire in a fractal
> >antenna and the frequency at which it is resonant.
> >
> >This statement is true now, and has been true for the known past.
> >
> >Does anyone doubt this?
> >
> >Bill
> >
>
> I'm sure that there is no relation between the juiciness of an apple in August
> and the resonant frequency of a fractal antenna.
>
> Antennas can be viewed as RLC circuits. Like all circuits, there are --or can
> be-- regions in the frequency spectrum where the the reactance goes to zero.
> Hence resonance is attained.
>
> For fractal antennas, the L and C are very much determined by the geometrical
> shape of the antenna in a given form factor. Thus a given frequency or
> resonance is degenerate: it can be attained by several different fractal shapes
> and iterations in this context. For a particular resonance.
>
> Hence to talk about the length of the wire and the resonant frequency is to
> indicate a profound absence of understanding as to what L and C are; what
> factors determine them; and so on.
>
> There is no question that finding the equivalent circuit of a fractal antenna
> is a very difficult problem. That's not what Mr. Aycock is referring to,
> however.
>
> Unfortunately Mr. Aycock has been banned from the below link, for re-posting a

> list- only offer(to provide a patent reprint) to a global, unrestricted USENET
> forum.
>
> But others are welcome to the list:
>
> fractalantenna-subscribe@egroups.com
>
> is the place where such discussions may be fruitfully continued.
>
> With Best Wishes,
> Chip N1IR

2037. Re: Kite design for 160M antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <Gc5w5.550$kc6.14967@news1.mts.net>
Source record: 180914

Hi:

There was an article in QST a while ago abt exactly this topic. The kite design was a "Scott Sled Kite" which is reputed to have the ability to fly at high angles and in light winds.

Here is a URL that I found with pictures of the design. I'm sure that you could scale them up to whatever size you needed for the job. A few minutes prowling the net will turn up a lot more pages I'm sure.

The article used a kite about 8 feet across if memory serves me correctly.

http://www.kewl.com.au/~plubke/sled.html

73 de
Lee Smith
VE4ANC

2038. Re: Kite design for 160M antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <Cn5w5.551$kc6.15048@news1.mts.net>
Source record: 180915

Here is one more URL which features a "double" version of the Scott Sled Kite. Looks like this could have some serious lift if scaled up a little. Enjoy!

http://www.ntos.demon.co.uk/kite.htm

2039. Re: SWR calculation needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39C0DF84.FF6D5DF@my-deja.com>
Source record: 180916

Robert Fanfant wrote:
>
> Would appreciate getting the algorithm/equation to calculate
> SWR given separate forward and reverse voltages. Am in the
> process of writing the software for a homebrew microprocessor
> controlled auto-tuner. The coupler returns separate forward
> and reverse voltages in the 0 to 5V range depending on SWR.
> Plan to convert both voltages using an 8 bit, 8 channel A/D.
>
> For those that have done this before, are there any
> suggestions for potential gotcha's????
>

Well, Roy gave you the formula:

>Roy Lewallen wrote:
>>
>> SWR = (Vf + Vr) / (Vf - Vr)
>>

however, it's not going to be that simple. Just having
the forward and reverse voltages is not enough information
to intellegently control a transmission line tuner. Without
phase information you won't be able to tell if you need
more/less C or L. If your program was going to be strictly
an itterative operation it could be done with minumum
information, but it wouldn't be very elegant.

What you are doing sounds like a fun project, however, I
think you need to grab a book on transmission lines and
antennas and give it a good read. Get a copy of the ARRL
Antenna Handbook. It has a lot of good chapters on transmission
lines, tuners, and antennas. It will give you a lot of insight
into your development.

Good luck on you project.

Martin K7MEM

--
Martin E. Meserve K7MEM martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.

Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2040. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <fR5w5.14115$6f1.578720@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180917

Bill:

I just thought I would add a more correct generalization to one of the statements made in this post:

"Fractenna" <fractenna@aol.com> wrote in message news:20000914070530.09407.00000300@ng-ff1.aol.com...
>
>
> For fractal antennas, the L and C are very much determined by the geometrical
> shape of the antenna in a given form factor. Thus a given frequency or
> resonance is degenerate: it can be attained by several different fractal shapes
> and iterations in this context. For a particular resonance.
>

In my opinion, this statement would read more correctly if it were written more generally as follows:

For all antennas, the L and C are a function of the geometrical shape of the antenna within a given form factor. A given resonant frequency or resonance can be attained by many different fractal or non-fractal shapes with this form factor. Additionally, the length of wire used to create any given shape is critical in determining the resonant frequency or resonance of the structure.

73,
Steve VE9SRB

2041. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C0E955.437CB1F3@oio.net>
Source record: 180918

Terry,
I'm afraid I would agree with you, it probably won't
last very long. A slightly heavier wire would last
longer. Give it a shot!
'Doc

2042. Re: manual for a Force 12 EF320X240S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 01:33:14 UTC
From: w1rfi@aol.com
Message-ID: <20000913213314.10990.00000035@ng-cf1.aol.com>
Source record: 180895

>From: "Jeff/kb2wqm" kb2wqm@amsat.org

>I need a copy of the manual for a Force 12 EF 320X240S I just picked up in a
>used tower, and got the Force 12 as part of the buy.

Hello, Jeff,

In case you don't get any offers, Force 12 is, last I heard, still in business.

(You can look them up at http://www.arrl.org/tis/tisfind.html.

Here is their info, from the categorical company and organization database at
http://www.arrl.org/tis/tisfind.html:

Company
Force 12
PO Box 1349
Paso Robles, CA 93447
USA
Tel: 800-248-1985
805-227-1680
Fax: 805-227-1684
Email: Force12@interserv.com.
http://www.qth.com/force12/
Products and Services
ANTENNA>ANTENNA MANUFACTURER; ANTENNA>BALUN; ANTENNA>YAGI ANTENNA;

73,
Ed Hare, W1RFI

2043. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 01:37:44 UTC
From: 2w8ji@contesting.com
Message-ID: <39c02b57.55701478@news.akorn.net>
Source record: 180897

On 13 Sep 2000 22:41:00 GMT, fractenna@aol.com (Fractenna) wrote:
>
>See
>http://www.fractenna.com
> for web site updates in the next week:!:-)
>73
>Chip N1IR

The D&B report I've seen doesn't look so good.

I'd contact D&B, and get them to update their information ASAP Chip.

73 Tom

2044. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 01:41:26 UTC
From: 2w8ji@contesting.com
Message-ID: <39c02c4e.55947897@news.akorn.net>
Source record: 180896

On Wed, 13 Sep 2000 15:48:37 GMT, cdean@firstcitizensbank.com (Corey Dean) wrote:

>A dipole is open ended a Double Bazooka is DC grounded thru itself
>taking away a lot of noise. Also you have a LOT more bandwidth than a
>dipole so you wont need to use a tuner as often. I dont like the
>weight issue though. They are a lot heavier. I will stick to my
>double bazooka. I would make one versus buying one though.

That does not reduce the noise. The noise is at the operating frequency, not at DC.

Bazookas are no less sensitive to noise than any other antenna the same size and location would be.

73 Tom

2045. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 02:26:13 UTC
From: mickey@mouse.com
Message-ID: <39c036db@news.server.worldonline.co.uk>
Source record: 180898

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:26320-39C01FD3-33@storefull-116.iap.bryant.webtv.net...
> Old Biker, KA3DWW wrote:
> "And finally, what kind of testing do we need to foster these goals?"
> ("Developing, testing and perfecting new methods until they become
> applicable to commercial comms?")
>
> Obviously we need require only demonstrated knowledge of the rules and
> proper operating practices. The bar should be lowered as much as
> possible to admit as many users as possible to the bands. If crowding
> results, a large number of hams will likely get more band space.
> Politics is like that!
>
> The average ham should look a lot more like the face of America and not
> like a bunch of freaky geezers.
>
> With a big market for new technology in the ham bands, suppliers will
> respond with the latest and greatest for hams to evaluate in the best
> way, that is in the hands of demanding end users.
>
> Best regards, Richard JHarrison, KB5WZI
>

If the face of America is Jerry Springfield you can keep it.

2046. Re: A Message to N1IR

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 03:58:27 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <D1Yv5.22776$pu4.1972082@typhoon.ne.mediaone.net>
Source record: 180899

Please tell me in detail about the visits from my "pals"
What did you put up with? Provide details of visit times,
locations and names. I expect no answer, since this is
more evidence of your paranoia...Can you produce any???
AT ALL???? even one???
You will not be able to respond honestly....'cuz you are a LIAR

Also, your "patent" is a joke....rambling BS with the
nebulous claim of only a matching technique...a dime a dozen...
nothing new here...and useless as well....I've got several
useless patents as well...it's easy to patent anything useless...
as you now know.

BTW, fire your patent lawyer, (unless that is yourself) no patent
lawyer in his right mind would have produced that drivel....

2047. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 04:55:49 UTC
From: R E Heath <re.heath@sympatico.ca>
Message-ID: <39C0597C.9819C0F2@sympatico.ca>
Source record: 180900

Richard Harrison wrote:
>
> Old Biker, KA3DWW wrote:
> "And finally, what kind of testing do we need to foster these goals?"
> ("Developing, testing and perfecting new methods until they become
> applicable to commercial comms?")
>
> Obviously we need require only demonstrated knowledge of the rules and
> proper operating practices. The bar should be lowered as much as
> possible to admit as many users as possible to the bands. If crowding
> results, a large number of hams will likely get more band space.
> Politics is like that!

Only sometimes. I guess you never listened to the 80 meter phone band back in the AM days. For the most part, it was just wall-to-wall heterodynes; only a few very powerful or very close stations made it. The rest was a dead loss. The size of the 80 meter band didn't change a bit.

>
> The average ham should look a lot more like the face of America and not
> like a bunch of freaky geezers.
>
> With a big market for new technology in the ham bands, suppliers will
> respond with the latest and greatest for hams to evaluate in the best
> way, that is in the hands of demanding end users.
>
> Best regards, Richard JHarrison, KB5WZI

The political truth of things is that as more and more persons demand easier and easier tests, the politicians will respond with easier and easier tests. Eventually, the end result will be no tests at all. I think that's the was it is with CB. If a radio "service" can essentially self-destruct when limited to only 4 watts of output, imagine what could happen to a radio service permitted to operate with more than a kilowatt!

Bob, W8BZ, VA3BZ

2048. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 06:51:31 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Tz_v5.1000$Qe.97195@newshog.newsread.com>
Source record: 180901

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Fractenna" <fractenna@aol.com> wrote in message
news:20000912191551.29186.00000608@ng-cc1.aol.com...
> >>I'm not familiar with a Kahr. How many Db is it?<
> >
> >The 9mm Kahr is 3 dB down from .45 ACP, and 3 dB better than .32. For
Black
> >Talons, add 3 dB. .22 LR gives you a multiplier for QRP.
> >
> >Rick K1BQT
> >
> >
> I understand you perfectly. But what quantity does the dB refer to?

Ahhh...newtons, or foot pounds which can kinda be called power?

Energy = 1/2 mass * velocity squared.

Roger (K8RI)
>
> 73
> Chip N1IR

2049. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-14 23:05:10 UTC
From: Frank Wood <frank@woodf-l.dircon.co.uk>
Message-ID: <kPdw5.795$3a.19295@news.dircon.co.uk>
Source record: 180768
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.chem.electrochem.battery,sci.electronics.basics,sci.engr.lighting,sci.engr.safety,sci.geo.meteorology

lf you had a direct lightning strike, we're talking about MEGAvolts, and MEGA amps, both at the same time! This will kill any electrial equipment: period, if it dosen't set your house on fire.

On a lower level, the high electric fields stand a good chance of doing your computer gear serious damage. Unpluggging it all, including from the telephone line, will minimise the risk.

If your backup systems involve car batteries, as do most, I commend you for your providence! And I assure you, that If you have a lightning strike of sufficient vigour to explode a lead-acid battery, that will be the least of your problems!

--
Frank Wood
frank@woodf-l.dircon.co.uk

"Dan Jacobson" <jidanni@kimo.FIXcomTHIS.tw> wrote in message news:8mhjcc$fbc@netnews.hinet.net...
> Let's say I have a 12 volt car battery hooked indirectly to house current by
> way of a backup lighting system that goes on if there's a power failure,
> tc. --- or any other situation where lightning might get to a car battery...
> upon a hit is my house at risk of an exploding car battery... acid/fire damage?

>

2050. Re: Mobile Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39C231EB.8808693E@attglobal.net>
Source record: 180669

I took my power cables right down the inside fender cowel (top) to the door on the drivers side. Look and you'll see room to slip it inder the hood hinge. then I pressed it in the moulding then runs down side of the dash/instrument panel. You'll be able to go where you want from there, but Doc had the best idea for a pickup (mine's a suburban and a little more problamatic here)... frill a hole in the floor. FORGET THE FIREWALL... unless you have more guts than I do, I studied it for hours and saw no really good places that would not be totally exposed or in the way. I have a diesel, but I'm sure if you have gas it's probably even worse under there...

Jim Esser, WD9FRF wrote:

> I'm mounting my IC-706 and a High Sierra Screwdriver on my P/U. Has anyone
> recommendations on the best place to get a coax, power and control cables
> for the antenna through the firewall of a 2000 GMC Sierra or Chevy
> Silverado? This firewall is busier than others I have worked on, but there
> must be someone who's done it.
>
> --
> Jim Esser, WD9FRF

2051. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <27535-39C23041-5@storefull-114.iap.bryant.webtv.net>
Source record: 180670

Chip, N1IR wrote:
"Anyway, I think Terry should try your suggestion and then compare with the antenna up in the air."

The U.S. War Department had this to say in 1945: On-Ground Antennas
Insulated wires of sufficient length laid on the ground, or better on vegetation just above the ground, will provide ground wave transmission with vertical polarization in line with the direction of the wire, that is, off either end of the wire, and for moderate horizontal angles from this direction. Such low antennas have the advantage of being easily concealed. A length of 600 / F feet (where F is the operating frequency in megacycles) ((this was 1945, the big hertz wasn`t in vogue)), or somewhat longer,is suitable, if length is adjusted by trial to permit good transmitter loading. A 100-foot on-ground antenna attached to Radio Set SCR-536 (handie-talkie) gives at least as good transmission in such directions as the whip supplied with the set (this was a good-sized antenna, no rubber duckie), and can be more easily concealed. Half-wave on-ground antennas (see par. 661d for length) can sometimes be used for short-distance sky-wave communications."
Full-wave Horizontal Wire An unterminated
end-fed horizontal wire one wavelength long and a few feet off the ground will produce a VERTICALLY polarized ground wave, in line with the wire, which has a materially higher intensity than that from a short whip. This assumes that the wire is fed as described for end-fed half-wave horizontal antennas (par. 663). The horizontal radiation pattern is like a figure 8, the two maxima being in the forward and backward directions of the wire, with the field at 30 degrees from these directions only slightly reduced. This antenna can be used satisfactorily over ground of high or average resistivity, but not over sea water or salt marsh.

Best regards, Richard Harrison, KB5WZI

2052. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <27534-39C233F8-20@storefull-114.iap.bryant.webtv.net>
Source record: 180671

Cecil, W6RCA wrote:
"It sure beats watching my puts expire."

If you`re trading in the stock markets, it`s best to be optimistic and buy stocks of companies with good prospects for the long term. Then hang in there until they are discovered or until it appears that they won`t succeed.

Best regards, Richard Harrison, KB5WZI

2053. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39C23843.B5F0E4B0@3n.net>
Source record: 180672

Patrick Jankowiak wrote:
>
> Actually, CB radio itself isn't so bad.....
> The big problem is the way the equipment is (ab)used and (mal)adjusted.
>
> ... CB today is mainly used for highway travel updates ... and
> long-distance dogpile-style nets which essentially carry no
> information except the stations' handle and a short hello.

Hmmm ... funny you should mention the latter. I gave up on DX when all I could get out of anybody was "QTH is ... Rig is ... etc.". I gave up on passing 13wpm when they changed the test to the same "typical" QSO. Why bother if the only info that's going to be exchanged is a "standard" QSO? Jeeze, I can program my computer to do that while I play FreeCell. In fact, some do! Sad ...
KA3DWW

2054. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pte4clkl2@plutonium.btinternet.com>
Source record: 180673

Cecil, just to cover the remote possibility of you really wanting to know whether radiation resistance is involved with the input impedance of a buried radial wire, the answer is a teeny little yes.

But in the present context we are concerned with the resistance of the soil which shunts current away from the wire at right angles, whereas radiation is usually assumed to be represented longitudinally by a resistance in series with the wire. It effectively increases conductor resistance.

But as the field set up by a radial wire is rapidly attenuated with distance from the wire, 30dB per wavelength ?, only the near field exists. Radiation is so small it can be forgotten about in ordinary soils.

But with loose, exceedingly dry sand dunes, no rain for 10 years such as found in the Sahara, a single buried wire would radiate quite well when using a vertical 1/4-wave as a counterpoise.

But in Sahara conditions one could just use a 1/2-wave dipole laid on the sand surface. The HF skin depth of dry sand is so great the effective height of a surface dipole is quite high. Even Hateley's thing works after a fashion it seems.

Fancy an expedition to Timbuckto?
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

CAM <cam2338@bigfoot.com> wrote in message
news:39C22041.AD9B2ECA@bigfoot.com...
> Reg Edwards wrote:
> > Cecil, so you are still reading my stuff, eh?
>
> It sure beats watching my puts expire.
> --
> http://www.mindspring.com/~w6rca

2055. Re: NEC4 Model of MI2 Fractal Loop (Validation of Model)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <q%qw5.106$Cq6.5088@bgtnsc04-news.ops.worldnet.att.net>
Source record: 180674

In an earlier post to the NG there were several issues raised as to the credibility and/or validity of using NEC4 to model the MI2 Fractal Loop. Here is the validation of the NEC4 model I created.

First, looking at Dr. Cohen's paper titled: "Fractal Loops and the Small Loop Approximation" Comm Quart Winter 1996, he presents an image of the MI2 Loop in Figure 1. This image appears to be an EZNEC picture of the geometry with wire segmentation depicted. It appears that Dr. Cohen uses 3 segments/wire in some places and 4 segments/wire in others. In my first NEC4 model of the MI2 Loop I used 3 segments/wire throughout the antenna. In a newly revised model, I am now using 5 segments/wire to mitigate concerns regarding segmentation issues.

As for the NEC4 results, here is a comparison of my NEC4 calculations and the results presented in Dr. Cohen's paper. Dr. Cohen's results are presented in Table 1 of his paper

Dr. Cohen
NEC4

First Resonant Resistance 26 ohms 28.4
ohms
Gain (see note below) 2 dBi
2.14 dBi

Third Resonant Resistance 18 ohms 19.0
ohms
Gain (see note below) 4 dBi 4
dBi

Frequency Ratio 1st and 3rd Resonance 1.79 1.82

Note: Dr. Cohen uses EZNEC to calculate gain based on ohmic losses in the wire. NEC4 presents directivity information. This is not a significant issue since the two antennas I will be comparing have identical wire length and identical wire diameter.

The model of the random geometry configuration is complete. Results will be summarized shortly.

73,
Steve VE9SRB

2056. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <27534-39C236D2-21@storefull-114.iap.bryant.webtv.net>
Source record: 180675

Don Jacobson wrote:
"Upon a hit is my house at risk of an exploding car battery?"

Not if reasonably protected from lightning.

I`ve experience with countless battery powered microwave repeaters
subjected to countless direct hits.

Never heard of a battery explosion caused by lightning.

Best regards, Richard Harrison, KB5WZI

2057. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pteq0$6b8$1@plutonium.btinternet.com>
Source record: 180676

Dear Steve, but according to Frac, fractal antennas ARE IN
the grand scheme of things.

Enjoy yourselves and be sure to let us know if any
sensational conclusions should be reached.

Reg

VE9SRB <srbest@worldnet.att.net> wrote in message
news:ujqw5.28943$M37.671637@bgtnsc07-news.ops.worldnet.att.n
et...
> Hi Reg:
>
> >
> > Isn't this much ado about nothing ?
> >
>
> In the grand scheme of things, YES!
>
> On the other had, a good discussion of differing technical
opinions is
> always enjoyable.
>
> 73,
> Steve
>
>

2058. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: bmanley <bmanley@ispchannel.com>
Message-ID: <39C24550.D713CEA2@ispchannel.com>
Source record: 180677

Sadly we are seeing much bad science derived by statistical correlation without identification of the the physical processes linking cause and effect. Correlation itself, without understanding the underlying process, is insufficient to define a physical law.

The medical profession is among the worst offenders. As recent evidence, we are hearing that electromagnetic radiation correlates with various cancers without even understanding why.

Bill Manley

Bill Turner wrote:

> On Thu, 14 Sep 2000 14:12:01 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >I think there's as
> >much evidence presented by this study which indicates that increasing
> >one's height, weight, age, or distance between the ears decreases one's
> >ability to think.
> ----------
>
> Some years ago I saw a pair of graphs which "proved" that the increase
> in lung cancer in women was exactly correlated with the increase in
> sales of nylon stockings. As Bill Clinton knows, you can prove or
> disprove anything.
>
> 73, Bill W7TI

2059. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000915115217.15785.00001392@ng-cd1.aol.com>
Source record: 180678

>IF I was running a KW, then my far field ERP would be close to 12,000 watts.<

I'm not being critical, but I'm really curious (in a serious way) about something. How did you come up with that number?

I'm presuming you used gain over some sort of ground with your antenna mounted at some AGL to figure it. But, what did you enter to describe your site?

Rick K1BQT

2060. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: andrew@cucumber.demon.co.uk
Message-ID: <8ptge0$h7j@cucumber.demon.co.uk>
Source record: 180679
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.chem.electrochem.battery,sci.electronics.basics,sci.engr.lighting,sci.engr.safety,sci.geo.meteorology

In article <kPdw5.795$3a.19295@news.dircon.co.uk>,
"Frank Wood" <frank@woodf-l.dircon.co.uk> writes:
>lf you had a direct lightning strike, we're talking about MEGAvolts, and
>MEGA amps, both at the same time! This will kill any electrial equipment:
>period, if it dosen't set your house on fire.

Typical direct hit current is 15-30kA.
There is a very rare mechanism which gives rise to currents of 100kA+.
I don't believe any strikes get near 1MA.

The voltages present which you need to be concerned about tend to be
as a result of this current pulse causing a voltage drop due to the
impedance of the conductors and ground it passes through. For example,
a 25kA hit on some metalwork on a building which happens to be earthed
with an impedance of 4 ohms (not unreasonable for a drainpipe in
contact with the ground - mostly the ground impedance) would result in
that metalwork reaching 100kV.
Earthed electronic equipment near this could easily be damaged.
If your house electrical earth goes into the soil nearby, it might
well get pulsed to some proportion of this 100kV, say 25kV. If you
have a modem on your computer, it will suddenly see a 25kV pulse
between the computer side (connected to the household earth) and
the telephone line side (connected to earth a few miles away).
This could well flash over the line isolation components in the
modem, wrecking the modem and the computer. These are just examples
(based on some incidents I've seen), but should give a flavour.

--
Andrew Gabriel
Consultant Software Engineer

2061. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d8484d.173746293@news.seanet.com>
Source record: 180680

On Thu, 14 Sep 2000 22:59:49 -0400, sideband <sideband@cac.net> wrote:

>Richard:
>
>Again, Thank you.
>
>Yes, 16 meters is a bit tall for an antenna. at this site. I had
>gathered, and I must have been incorrect, that Fractals were small in
>comparison to the height of, say, a dipole for the same frequency
>range. When I do get on the air for real, I'm going to stay mostly
>between 27.355 and 29.6?? Yes... that's 2.3~ Mhz bandwidth. I'm aware
>that this can pose problems in antenna design, if I don't wish to use
>a tuner.
>
>I prefer SSB as my mode of operation, as I've stated before, and I'm
>not 100% sure which frequencies on 10M are acceptable for SSB, and
>which are FM/AM/Other. Perhaps a bit more research on my part might
>help narrow down my choices.
>
>I consider a "safe" swr to be anything around 2.5:1 or lower. Maybe a
>dipole set for the center of my desired transmit range would be the
>better choice, using a tuner where necessary at the ends? Or would a
>fractal design help me realize the idea of transmitting without a
>tuner?
>
>I'm just insanely curious about this idea. If the doggone thing
>actually can meet these needs, then I'm game to try one out, provided
>it's something I can put up in a tree, or on the side of the apartment
>building.
>
>If not, I guess I'll just bite the bullet and run a couple of vertical
>dipoles, one for 10 and one for 11, out in the tree.
>
>Thanks again, for the information, and your time. I do realize you are
>busy with this project, and others, and that makes these drops of
>information all the more valuable to me.
>
>73's and good DX.
>
>-SSB

Hi OM,

Sorry, I threw one supreme curve ball your way with my recommendation
for a "small" fractal.

WRONG WRONG WRONG

In fact I had simply steered you back to a large one. 16 meters indeed, that absurdity should have occurred to me as I was typing.

I was pressed to polish up my work, answer your post, and get something to my site. I don't think I was firing on all three cylinders there. For another hit, qsl.net's ftp server appears to be down.

So back to the "small" fractal solution. There still remain what I characterized as risk choices, but I'm afraid they would be very long shots.

73's
Richard Clark, KB7QHC

2062. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39da4dfc.175201466@news.seanet.com>
Source record: 180681

On Fri, 15 Sep 2000 08:20:38 -0500, CAM <cam2338@bigfoot.com> wrote:

>sideband wrote:
>> But the Fractal, which may indeed be broadbanded enough for my
>> purposes, made out of steel electrical conduit, brazed together, and
>> properly fed, and hung in the tree, might be another solution.
>
>I may be wrong, but I think the fractal antenna being discussed
>is directional, unlike an ordinary 1/4WL vertical, so some means
>of rotating it may be necessary for all-directional coverage.
>--
>73, Cecil, W6RCA http://www.mindspring.com/~w6rca

Hi all,

Yes, Cecil is right. Due to the spread of the antenna inherent with fractal design, for some frequencies gain is developed along an axis. The curious thing is that this axis is not always aligned with any obvious physical structure. Even more confounding is that the axis of greatest gain twists and turns over frequency (large frequency changes, not small).

This discussion is, however, a product of my mistaken presentation of a large fractal as a small one. A most egregious error that is very misleading.

AHHH Practical Designs - humbug!

73's
Richard Clark, KB7QHC

2063. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <jrsw5.15662$6f1.694725@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180682

The performance comparison of the MI2 Fractal Loop and an arbitrarily chosen random wire geometry is complete. The conditions of comparison are as follows:

Both antennas have exactly the same overall total wire length. In this case: 27.56 meters

Both antennas occupy the same overall physical aperture size. In this case: 2.80 meters by 2.66 meters.

Both antennas have the same wire diameter: In this case: 0.64 cm

Both antennas are symmetric about the X and Y axis. This is a reasonable condition for any loop antenna.

Both antennas were modeled with NEC4. The validity of using NEC4 to model the MI2 Fractal Loop has been previously presented in a recent post. The NEC4 model of the MI2 Fractal Loop uses 500 wire segments. The NEC4 model of the random geometry uses 504 wire segments.

The antennas were modeled to determine the first and third resonant frequencies, the resonant resistance, the 2:1 SWR bandwidth wrt 50 ohms for the first resonance and the directivity at both resonant frequencies.

The Comparison:

MI2 Random

First Resonance: 15.749 MHz 15.403 MHz

Resonant Impedance: 28.4 ohms 27.3 ohms

Directivity: 2.14 dBi 2.13 dBi

Bandwidth (%): 1.27% 1.17%

Third Resonance: 28.65 MHz 28.105 MHz

Resonant Impedance: 19.0 ohms 16.9 ohms

Directivity: 4 dBi 5.8 dBi (see note below)

Note: The directivity of the antennas are different simply due to differing pattern shape. Based on a quick review of the patterns, it would be unreasonable to conclude one to be "better" than the other.

Conclusion: In my opinion, the performance of these antennas is so marginally different, it would be unreasonable to declare that one antenna

performs better than the other. What is important however is the significance of the Fractal geometry as compared to a non-Fractal geometry. The performance of the loop antenna is more a function of the overall wire length and the compression of the structure about the feedpoint (aperture size) than the Fractal geometry. With the exception of radiation pattern performance as a function of increasing frequency, it is safe to conclude that the geometry of the antenna is less significant than these other factors. Although certainly interesting, the Fractal nature of the antenna geometry is not the significant factor in determining the antenna performance.

Anyone interested in receiving GIF pictures of the antennas or the NEC files, please let me know.

73,
Steve, VE9SRB

2064. (none)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: future2@prodigy.NET
Message-ID: <000701c01f26$5dacd500$072098ac@default>
Source record: 180683
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

------=_NextPart_000_0004_01C01F04.D500BEE0

charset="iso-8859-1"

Sept. 7, 2000

First off. To avoid any complication I am willing to sign a release of =
yours giving you full access to all medical records, test and opinions, =
all DDU of New Mexico records and reports and all Social Security =
medical records and reports plus any and all financial records including =
any and all disability social security benefits every paid me, all =
Medicare payments every made in my name, all medical and hospital =
records and any and all bills and payments you require to show that I am =
dead serious in asking you to please investigate this case because I am =
fighting a medical malpractice and conspiracy and fraud case PRO SE =
against some very powerful attorneys and doctors. Also if anyone of the =
doctors in this case still claims that their diagnosis especial on or =
around Feb. 1995 of my medical condition as that of Limb girdle muscular =
dystrophy is correct that doctor can immediately end this case simply by =
provide you and me with the medical evidence and test results they say =
they performed on me that especially shows their Feb. 1995 and dates =
thereafter diagnosis of LGMD and total disability is true and my 15-20 =
year medical condition was and is indeed that of LMGD. They can not =
provide you with any such evidence because it does not exist as =
defendants attorney has testify already in court to, and no test were =
every given by the two doctors to support their unbelievable =
misdiagnosis. Again, no blood test, muscle biopsy test, medical test =
were given that either doctor can point to that they say supports their =
false Feb. 1995 and dates thereafter misdiagnosis and claims that I am =
and have been for over 15 years totally disabled entitled to full social =
security and Medicare disability benefits. In fact prior to the Feb. =
1995 date and repeatedly after the Feb. 1995 date many doctor and =
experts in the field of neuro-muscular dystrophy have examined me and =
make blood test, EMG tests, muscle biopsy test and all have written that =
I do not now nor have I ever had LGMD with some going so far as to say =
that given the medical evidence present today and during the 1995 =
investigation NO DOCTOR could have mistakenly misdiagnosed my medical =
condition as that of LGMD. This was not only a misdiagnosis but once the =
misdiagnosis was discovered by me in early 1995 the doctor involved =
immediately began a cover up of the truth and conspired with a fellow =
doctor to continue the misdiagnosis knowing it was a lie and knowing =
that when they were advising social security and DDU in 1995 that I was =

totally disabled it was not true. The two doctors in this case had all =
the medical evidence from the UNMH-MDA clinic and the written words of =
the doctors and knew if they went ahead and intentionally diagnosed a =
false diagnosis it would be exactly that. If you investigate this case =
and open the District Court Records # CV-98-00271 you will find all =
medical evidence that I have submitted as evidence including the one =
doctors own late 1995 and early 1996 letter admitting he knew I was not =
ever totally disabled. I need help before these doctors and there =
lawyers get away with fraud, conspiracy and cover up. I have brought all =
the information to the judge in this case and he seems to not be =
listening instead overly concerned with rules of the court and not law =
of the land.

I have a question news media: When did the NMRA District Court and other =
Court rule book become law or statute onto themselves with the power to =
supersede statute and law and with so much power that they are looked =
unto by Judges and lawyers as laws unto themselves even though not one =
of them have ever been enacted into law or statute? How can a rule of =
court supersede statute and be held above statute with the power to =
overrule statute? Summary Judgment is a Rule of the court, created by =
judges and lawyers to skirt truth and real justice. When will the =
citizen of New Mexico see what attorneys and Judges have done taking =
over their court system and take that control back away from the Judges =
and the lawyers who seem to not have the citizens rights in mind? Who =
watches the attorneys and judges? Why is it that judges seem to be =
screaming and yelling at ordinary citizens who are seeking justice? =
Should we as ordinary citizens be afraid of the courts and the Judges =
knowing that a fancy lawyer can make a claims or accusation with no =
evidence to back such a claim or accusation and get away with it? In the =
case number included in this brief you will find specific examples of =
where a powerful lawyer has written their response to a medical law =
suit, not a medical malpractice lawsuit, in which the attorney from the =
very beginning makes not only bogus claim but out right un-provable and =
false claims that have been brought to the judges attention without the =
judge acting on one single one. If I went into court and lied throughout =
my questioning whether in writing or not I would be put in jail. Why =
aren=92t the lawyers held to the same standards. I thought you, as the =
media, were at the van guard always alert, always vigilant for the =
people. Then how did the lawyers take control of the courts away from =
the people?

The purpose of this letter is as follows:

THE ATTORNEY REQUIRED TO APPROACH THE MEDICAL MALPRACTICE COMMISSION =
PROVISION OF THE MEDICAL MALPRACTICE ACT Which denies individual =
citizens their constitutional rights to approach the courts HAS BEEN =
DECLARED UNCONSTITITIONAL IN CASE CV-98-00271 BECAUSE THEY DENY =
PLAINTIFF HIS CONSTITUTIONAL RIGHTS TO APPEAR BEFORE THE COURTS. =
PLAINTIFF IS TRYING TO DECLARE THE DISTRICT COURTS RULE BOOK WHEN IT =
SUPERSEDES LAW AND STATUTE UNCONSTITITUIONAL ESPECIALLY WHEN IT IS LOOK =
TO AS LAW AND STATUTE ONTO THEMSELVES CREATED BY THE COURTS AND FOR =

ATTORNEYS AND NOT BY THE PEOPLE AND FOR THE PEOPLE=85

Even if you don=92t look into case CV-98-00271 because of how =
complicated it is, and it involves the Muscular Dystrophy Association =
hospital clinic, which most media outlets support, Please, be at the =
next hearing to see how the courts don=92t look for truth and justice =
and have become so influenced by attorneys.

How can a Albuquerque High School Graduate, not schooled in the law, =
stand up Pro Se and fight a medical battle against a well entrenched =
medical profession hell bent on defeating anyone who comes up against =
them, with the same medical establishment having no interest in the =
truth about the persons health nor does it want to do the medical =
testing to see if one of its own created a knowingly and intentional =
false diagnosis? Why would physicians have a code of silence to protect =
an individual doctor who is allegedly hurting the very people the =
doctors claim they are helping? How can the same Albuquerque High School =
graduate go out and find a medical expert who is willing to testify that =
a Feb. 1995 diagnosis of plaintiffs medical condition as that of Limb =
Girdle Muscular Dystrophy was a negligent misdiagnosis and that from the =
medical evidence presented no doctor could have mistakenly diagnosed a =
disease as extreme as Limb Girdle Muscular Dystrophy? That even though =
the two doctor in the above named cased diagnosed and gave that =
diagnosis to the DDU of New Mexico and Social Security, the Plaintiff =
may not be totally disable as the two doctors claim? Was there any =
Medicare fraud as a direct result of the doctors alleged false diagnosis =
and did the doctor collect Medicare payments knowing that the patient =
did not have Limb Girdle Muscular Dystrophy and therefor may not have =
ever been totally disabled even though the one doctor continued said =
disabled diagnosis for over 15 years now? Is there Medicare and social =
security fraud going on here? How dare that same High School graduate =
fight a battle against injustice and indifference by the Court and is =
holding his owe against a powerful legal firm and legal precedent and =
think he will stand the test of time? HOW CAN THAT BE? Who does he think =
he is to be demanding justice and his right to the courts Pro se? Who =
does he think he is filing legal brief, notices and motions against us, =
the establishment as if he is a lawyer, not concerned with the rules of =
edict we attorneys have created for the courts to follow and implement =
as we dictate? How can a Pro Se high school Graduate think he can demand =
justice and think he can mention the word truth to the courts without =
severe consequences against him? This Pro Se individual dares to not =
follow our, the lawyers, lead in our endeavor to consume weeks and =
months on rules of the court and not laws by daring to constantly =
mention the facts and truth of the case? How dare him rock the boat of =
indifference and delays created by attorneys so they can collect =
exorbitant amounts of money doing nothing? How dare this Pro se =
individual approach the courts as an American citizen with inalienable =
rights and not be afraid of the courts or the judge sitting on the bench =
or what we, as attorneys, can get the judge to do to him? For we are =
friends of the Courts and some of the judges and our opinions count. We =
fraternize with some of the Judges unopposed with no fear that the media =

will ever question why we do that? We are higher that military officers =
who are not allowed to fraternize with enlisted personal? We are an =
entity unto ourselves, above examination by the media or anyone else. =
For we are the Lawyers of the court. All normal citizens should be =
afraid of what we, attorneys, can and will do to them if they dare =
challenge our authority before the courts. All normal citizens should be =
afraid of what we are doing to them and their rights behind closed doors =
unopposed by anyone or agency? We can paper you to death and you will =
loose on rules not law. How dare a Pro se individual go to the media and =
the public for help against us, the establishment and status quo, asking =
for legal and maybe even financial help thinking that the regular Joe =
cares one bit that we, the attorneys, have taken control of the courts =
and will not let it go back to the people without a fight! We are =
accountable to no one and we=92ll milk you dry of all you have before we =
throw you out like the garbage we think you are. The courts will do as =
we dictate because we have written the book of rules the courts have =
made laws unto themselves that supersede constitutionally created laws =
and statutes.=20

I hope you the media will not throw this in the garbage and do nothing =
for the people, but I must at least try. For if you just bother to read =
the information in especially District Court case #CV-98-00271 you will =
see what the above is about and how the lawyers have intentionally =
created a situation that benefits them and only them. I NEED HELP.. Who =
will help if you won=92t? One good thing about the computer revolution =
and especially the chat rooms and news and newsgroups organization on =
the Internet, even if the media chooses not to act, we still can get =
this out to the public.=20

I really don=92t understand, you are the media claiming that you are =
helping to look out for the welfare of the community but have you ever =
bothered to quietly and undercover sit in the District Court rooms of =
Bernalillo and see the unbelievable attitude that some of the Judges on =
the bench have towards the citizens of our state and how they are =
screaming and yelling possibly threatening regular people who only want =
justice. Do you periodically go undercover and sit in the various Court =
room to see for yourselves the attitudes of the judges on the bench and =
how they treat the people. Who monitors the Judges on the bench and =
their attitudes and the decisions that these judges are making? Do you =
even know or care what the Judges are doing and saying? Have Judges =
become so bitter with the people for what attorneys have done and =
continue to do unopposed that their attitudes, feelings and ruling are =
being adversely affected against the people? Why haven=92t the Judges =
been able to see through the theoretic and delay tactics Attorneys have =
created? IS IT BECAUSE JUDGES ARE ATTORNEYS THEMSELVES? Trained in the =
theoretic=92s of the show and not concerned with the law of the land. =
Does justice grind slowly down the road to completion as Attorneys have =
claimed or do attorneys intentionally create delays that the judges =
blame on the people? Why cant the people take back control of the court =
room? Are Judges fraternizing with attorneys, actually have coffee =
brakes with them, golfing with them? Why would an attorney claim to be =

friends with a judge and claim that she is going to have coffee with =
that judge? What is being discussed behind closed doors at these claimed =
coffee=92s and are lives being ruin because of such fraternizing? =
fraternization between a judge and a lawyer is a very dangerous thing =
especially when that lawyer makes insinuated comments that she=92s =
friends with the judge and she=92s off to have coffee with the =
judge-what are these statements for? More importantly: are the Judges =
ruling being in anyway influenced by any claimed friendships between a =
attorney and a Judge? When a Judge is sitting on a bench judging a case =
at hand, does that judge look at the attorney=92s and say blank is my =
friend and therefore he/she rulings are being adversely affected by such =
a friendship? Is the court system for the people, by the people and of =
the people or is it really as it looks, for the lawyer, by the lawyer =
and of the lawyer? Look into this case and see how can a lawyer do =
nothing for almost 2 years.

? Do you really think a court case can take 2 or more years because =
justice moves slowly? Or is it intentional on the parts of attorneys to =
intentionally delay and file one document at a time? Who fights for the =
people and how do you put a stop to these and other intentional delaying =
practices created by lawyers that serve no purpose for the client but =
does line the attorneys pockets? Once a case has started there is no =
Court charges for filing a motion in that pending case, yet lawyers are =
charging upwards of $500 to thousands for each and every motion they =
file, even when then file motions a piece at a time? To say that their =
time is that valuable and more valuable than their clients is bull? 90% =
of all motions and notices and documents are created by a lonely =
secretary who is not a lawyer and is not paid lawyers fees. When will =
the courts have an accounting of what lawyers are doing and the charges =
they are charging forcing an attorney to be accountable for the charges? =
Why doesn=92t a lawyer have a log book logging in the exact amount of =
time he spends on an individual case, stating the exact dates and time =
of day to justify their exorbitant charges? Why is a lawyer allowed to =
charge that much and milk a client dry? Who watches the lawyers?

TO WHOM IT MAY CONCERN, I AM NOT AN ATTORNEYS NOR DO I CLAIM TO BE NOR =
DO I HAVE THE EDUCATION TO DO AN ATTORNEYS JOB but because of a medical =
cover up intentionally created by the doctors in this case as testified =
to by the doctors own written letter submitted as evidence in this case =
and ignored by the courts and because of a false diagnosis given to =
social security and the Disability Determination Unit of the State of =
New Mexico I have be saddled with the disease of Limb girdle muscular =
dystrophy and claimed to be totally disabled collecting over the past =
15-20 years tens of thousands of dollars based on this one doctor =
knowingly false diagnosis. Once this information was given to the courts =
and social security in writing neither cared about the truth and social =
security stated it was not their business for me to go to court. After =
the court denied Defense attorneys motion to throw this case out of =
court and after the judge declared the Attorney Required Provision of =
the Medical Malpractice act unconstitutional, this case was sent to an =
arbitration meeting in which the arbitrator attorney stated to plaintiff =

that if I was seeking truth and justice I was at the wrong place. Even =
if the Court has the doctor written letter stated he knew Plaintiff was =
not totally disabled and continued the diagnosis anyway for decades =
passing that diagnosis to the DDU and Social Security, if you are =
looking for justice and the truth you would not find it in a court of =
law. It seem to me that court rules have become over law.=20

In case CV-98-00271 the Courts and attorneys have not mentioned the word =
truth nor has it mentioned the facts in this case nor has it fought over =
law and statute in this case for over two years. In fact in the majority =
of the Defendants briefs and motions filed in this case, incorrect =
statements and allegations are made with immunity from the court. Its as =
if the attorneys in any case can simply write what they want even if =
what they write is not true, has no baring on the case and has no =
evidence to support and when brought to the courts attention, the court =
simply ignores the evidence. How can a case be allowed to continue for =
over two years based on insinuation and not provable statements from =
attorneys? All the arguments are centered around court rules, summary =
judgment, discovery rules. When will the law be mentioned or the word =
truth or the facts.

When will the Courts go back to what they were created for, to judge the =
facts in a case, decide the truth from those facts and to dispense =
justice based on those facts and not on the court rules book or lawyers =
theoretical symphony training that was taught for the expressed purpose =
to sway the courts, judges and jury even though it is only a act, =
trained by tricky educators who know that symphony thoracic can most =
assuredly influence a judge and a jury even though it is only a play or =
a Act on the attorneys part. Example: A person is video taped throwing a =
brick through a window severely harming a person inside. That person =
without pressure writes that he did throw the brick. For two years in =
court those facts are not look at or even mentioned and the words =
looking for the truth has no baring on the case because lawyers have the =
judge tied up on rules of the court that have no legislative backing. =
With the lawyer for the accused actually trying to get the case thrown =
out of court by summary judgment thereby never mention the truth in the =
case. More importantly the person can actually get off without any =
justice simply based on rules of the court even though their is video =
tape that the person actually throw the brick through the window. That =
tape and the evidence has no baring in court proceedings for over 2 =
years, why? More importantly, the attorneys in the case are collecting =
exorbitant amounts of money for delay tactics and doing nothing. The =
Miranda rights are good and do what they are intended to do, protect the =
guilty and innocent from testifying against themselves. But if that =
defendant is running around telling everyone he did it and more =
importantly the court ain=92t going to do shit, when does the injured =
parties right supersede lawyers rules? Who created the District Courts =
Rule book and more importantly are they legislative law? How does rules =
made up by judges and lawyers for judges and lawyers become law unto =
themselves with the actual power to supersede legally constituted laws =
and statutes with the ability to overrule constitutional created laws =

and statutes?=20

Even though the New Mexico Supreme Court says that the District Court =
Rule book is law and statute, carrying the same weight as law and =
statutes and in fact superseding Law and statute constitutional CREATED =
by the legislature with the ability to overrule constitutional =
implemented law and statute, and in fact is placed above law and statute =
by the Judges of the Courts with the power to supersede law and statute, =
no where can you find one single rule of the District Court Rule book, =
including the summary Judgment rule, legislated into law or statute by =
the legislative branch of the New Mexican government. In the above =
mentioned case the Courts has used the Rule book of the District Courts =
as laws unto themselves using them to decide decisions on various issues =
from discovery to Summary Judgment without mentioning the clear evidence =
in this case and without even knowing what statute apply to this case =
and without ruling on the various Motion to Decide which Laws and =
statutes apply to this case. How can a Judge decide that a Rule, as =
Summary Judgment is, applies, when it has not decided on which statute =
governs this case even though it asked for such a Motion to be filed. =
What I feel has happened is that Attorneys have influenced and so =
corrupted the Courts and the Judges that somehow the Judges actually =
think that rules made up by attorneys for attorneys and not for the =
people have been declared constitutional law by the Judicial branch of =
the government and not through the constitutional elected legislative =
branch. No where in any legislative created statute does the courts rule =
book rules become law.=20

What I don=92t understand is why the media, with claims that they were =
created to look after the interest of the people, has been silent on =
this vital issue. And I don=92t understand why the media, who has the =
power to influence the people into action, has not looked at the =
unbelievable delaying tactics attorneys are using in court for the only =
reason but to collect exorbitant amount of unjustified moneys for doing =
nothing but delaying? How does a regular citizen even know that when the =
lawyer on the other side of the desk is saying its going to take month, =
maybe even years for a final outcome in their case, its not because =
justice moves slowly, it simply because the attorneys are delaying the =
final outcome and intentionally filing one document at a time to stretch =
the case out years because it is in their best interest financially to =
do so. Medical experts who are hired to testify are doing the same =
thing. They know certain test will be required to support their hired =
and paid for testimony that could easily be done in days, they stretch =
down the road months by doing one test at a time. Who stops the lawyers =
and experts? Who keeps a watchful eye on them making sure they are not =
testifying for the money? Simple example: a back x-ray from you back =
doctor cost $100 to produce and $200 for him to evaluate. A expert =
charges $500 for that x-ray and 1-5000 for his evaluation and then more =
for is on bench testimony- why? Because the expert is strictly in it for =
the money the lawyers can pay him with and not for truth or justice? =
Seems to me that the courts should look at expert testimony with =
suspicion for what it is, hired and paid for testimony and not the =

truth. If an expert is required, and the law says one is required then =
why hasn=92t anyone taken that responsibly out of the hands of the =
lawyers and experts and put it into a neutral hand with doctors and =
experts who have no financial gain to gain and therefore testifies on =
the truth and not on paid slanted truth? Why haven=92t you, the media, =
bothered to look at expert testimony for what it really is. A expert who =
has prostituted his license and integrity for money and only money? Will =
a expert look at a person damaged if that person has no money? How can =
we the people stop the courts practices of using attorney hired =
experts=85 Example: As the media know, social security disability =
Attorneys are intentionally dragging out disability determinations =
decisions for 12 months to 2 years as standard practicing procedures, =
which decision could easily be made in one month, because the lawyers =
get 33 and 1/3 percent of all back pay and 331/3% of 1-2 years is quite =
a lot of money especially when they do nothing but collect money.=20

Why has the court developed so many confusing rules and regulations that =
a simple man can not approach the courts pro se? Do the judges ask for =
an accounting of the amount the attorneys are charging and the delays =
the attorney ask for? ARE ATTORNEYS WHAT THEY THINK THEY ARE, INITITIES =
ONTO THEMSELVES? If a attorney is doing nothing and taking advantage of =
a clients depression, who do you go to, to stop that attorney Second: =
Are judges fraternizing with Attorneys and for what purpose? Are =
attorneys actually going into Judges offices and sitting down and =
drinking coffee or tea with Judges and shooting the shit as this one =
attorney claims? You know, the military has a very important rule that =
Military officers are not allowed to fraternize with enlisted personal =
for a very good reason. So the look of even a partial amount of =
favoritism will not be displayed. I think this rule applies here. Surely =
Judges and Attorneys are not better than officers in the military. If =
Judges and attorneys are claiming that nothing is going on then why the =
fraternization? If these coffee and tea brakes are simply that, then why =
does this attorney go to great length to mention that he/she are good =
friends with the particular Judge and that they actually are off to have =
coffee with my dear friend? How do we find out if there is such a rule =
against such fraternizing and if not who regulates such fraternizing to =
be sure nothing improper is being done behind closed doors? Who keeps an =
eye on those activities between Judges and attorneys? A regular citizen, =
who has been harmed by a doctor and who covers up that harm, should have =
no fear to approach a judge for help and no fear that their rights will =
be trampled on because the opposing counsel is going to make sure that =
this case is kept in the courts so long that it will ruin the damaged =
party financially? Who is looking at the cost that attorneys are =
charging. A domestic case that is filed cost at the most $200 to file. =
All Motion have no court charges yet attorneys charge Upwards of $500 or =
more for supposedly Motions that have no court charges and that may be =
one page long. Who does a regular citizen go to, to find out if she is =
being taken advantaged off by a lawyer who know the client is scared or =
in manic depression? Please Help?=20

Now back to my case still pending in court.

If what the doctor wrote in his 1995 and 1996 letters are true, that he =
knew for decades that plaintiff was not totally disabled, the =
implication are mind boggling. This doctor was and is instrumental in =
getting plaintiff full disability social security benefits and =
continuing full disability benefits for almost 20 years now even though =
he writes that he knew for decades that plaintiff was not totally =
disabled but did not bother telling anyone, including plaintiff, DDU, =
social security, other hospital, doctors. According to the experts at =
the UNMH MDA Clinic this would indicate that plaintiff does not now nor =
has he ever had LGMD nor was plaintiff ever totally disabled for almost =
20 years now even though the doctor in this case continually diagnosed =
it for 15 years with out one single medical test record to support his =
diagnosis

The media needs to understand clearly this that the doctor involved will =
not or can not produce one single medical or lab test report, one single =
EMG test report, one single blood test report, one single muscle biopsy =
test report that the two doctors claims they performed on plaintiff in =
Feb. 1995 and dates thereafter that they claim support their Feb. 1995 =
and date thereafter false diagnosis of plaintiff medical condition as =
LGMD (Limb Girdle Muscular Dystrophy) and total disability that they not =
only passed off as truth to plaintiff, but also to Dr. Hamilton of the =
DDU, the DDU, and social security, and if this same doctor will not or =
can not produce one single medical or lab test report, one single EMG =
test report, one single blood test report, one single muscle biopsy test =
report that he claims he did over a 15 or more year period while he was =
plaintiff doctor that that kept this patient on total disability social =
security and Medicare benefits for over 15 years and this same doctor =
can not or will not produce one single medical record that supports his =
15 or more year intentional and false diagnosis of plaintiffs medical =
condition as LGMD and total disability that he knowingly and =
intentionally pass to the DDU, DVR, social security, to keep his patient =
on total disability social security benefits and Medicare.

"The implications are mine boggling: For years - This Doctor looked my =
family and me, the DDU and Social Security straight in the eyes and knew =
he was lying and passing a false diagnosis". That=92s Why go public. If =
I don=92t the courts will continue to not worry about the truth and will =
keep being consumed with its rules of court that the courts have =
elevated above law and order and truth! I need help from you the media =
to get this out into the public domain, to get it out of the shadows as =
it were so that no judge or lawyer will be able to hid in the dark =
again.

Do you realize that there is a constitutional battle going on in the =
District Court of Bernalillo county, Albuquerque, New Mexico, Dis. CT. =
No. __CV-98-00271___, W. Daniel Schneider, presiding justice, Over the =
attorney "Required" provision of the Medical Malpractice Act and the =
RULES of the court especially what the court calls summary judgment, =
that is slowly but surely headed for the U.S. Supreme Court. Do you =
realize that an ordinary Albuquerque High and TVI School Graduate, has =
not only challenged the District Court system, he has fought a fine =

fight "PRO SE" against a powerful attorney establishment, getting =
Justice Schneider to declare the "Attorney Provision of the Act" =
unconstitutional!

All either physician has to do is provide proof positive to this court, =
plaintiff and the media that shows that either one of these physicians =
bothered to do the bare minimum of medical and lab test, EMG test, in =
Feb. 1995 and dates thereafter that they say supports their diagnosis of =
LGMD and total disability that plaintiff can present to social security, =
the DDU and the court and say see, I do have LGMD and am totally =
disabled and am legally entitled to total disability benefits from =
social security for the rest of my life and you can=92t take it away or =
demand pay back. ITS THAT SIMPLE. Give me proof that Dr. Gregg ever =
bothered to periodically re-evaluate my medical condition despite =
several DDU, social security re-determinations that he was the only =
doctor. That support the years of pain and suffering, hospital stays, =
medicines, brain seizures, congestive heart failures, lost of home, =
wife, potential. Please asked the doctors=85=20

I asks this news organization to please at least go to the court house =
and look up and read these cases records and especially all the evidence =
placed before the judge and please present this case publicly to the =
people so that the attorneys can not bury it under a pretense of =
innocence and court rule. I am fighting an uphill battle that has grown =
very difficult to fight. I ask the ordinary people out there who are =
seeking equal justice under the law to Help. Medical experts and =
documents cost thousands. I am at my roads end. Without your financial =
support the doctors will win by default and no money.

Sincerely your,

Frank T. McMurtrey

10423 Valtierra Pl S.w.

Albuquerque, NM 87121

(505)836-2547

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Sept. 7, 2000

First off. To avoid any complication I am willing to =
sign a=20
release of yours giving you full access to all medical records, test and =

opinions, all DDU of New Mexico records and reports and all Social =
Security=20
medical records and reports plus any and all financial records including =
any and=20
all disability social security benefits every paid me, all Medicare =

payments=20
every made in my name, all medical and hospital records and any and all =
bills=20
and payments you require to show that I am dead serious in asking you to =
please=20
investigate this case because I am fighting a medical malpractice and =
conspiracy=20
and fraud case PRO SE against some very powerful attorneys and doctors. =
Also if=20
anyone of the doctors in this case still claims that their diagnosis =
especial on=20
or around Feb. 1995 of my medical condition as that of Limb girdle =
muscular=20
dystrophy is correct that doctor can immediately end this case simply by =
provide=20
you and me with the medical evidence and test results they say they =
performed on=20
me that especially shows their Feb. 1995 and dates thereafter diagnosis =
of LGMD=20
and total disability is true and my 15-20 year medical condition was and =
is=20
indeed that of LMGD. They can not provide you with any such evidence =
because it=20
does not exist as defendants attorney has testify already in court to, =
and no=20
test were every given by the two doctors to support their unbelievable=20
misdiagnosis. Again, no blood test, muscle biopsy test, medical test =
were given=20
that either doctor can point to that they say supports their false Feb. =
1995 and=20
dates thereafter misdiagnosis and claims that I am and have been for =
over 15=20
years totally disabled entitled to full social security and Medicare =
disability=20
benefits. In fact prior to the Feb. 1995 date and repeatedly after the =
Feb. 1995=20
date many doctor and experts in the field of neuro-muscular dystrophy =
have=20
examined me and make blood test, EMG tests, muscle biopsy test and all =
have=20
written that I do not now nor have I ever had LGMD with some going so =
far as to=20
say that given the medical evidence present today and during the 1995=20
investigation NO DOCTOR could have mistakenly misdiagnosed my medical =
condition=20
as that of LGMD. This was not only a misdiagnosis but once the =
misdiagnosis was=20
discovered by me in early 1995 the doctor involved immediately began a =
cover up=20
of the truth and conspired with a fellow doctor to continue the =

misdiagnosis=20
knowing it was a lie and knowing that when they were advising social =
security=20
and DDU in 1995 that I was totally disabled it was not true. The two =
doctors in=20
this case had all the medical evidence from the UNMH-MDA clinic and the =
written=20
words of the doctors and knew if they went ahead and intentionally =
diagnosed a=20
false diagnosis it would be exactly that. If you investigate this case =
and open=20
the District Court Records # CV-98-00271 =
you will=20
find all medical evidence that I have submitted as evidence including =
the one=20
doctors own late 1995 and early 1996 letter admitting he knew I was not =
ever=20
totally disabled. I need help before these doctors and there lawyers get =
away=20
with fraud, conspiracy and cover up. I have brought all the information =
to the=20
judge in this case and he seems to not be listening instead overly =
concerned=20
with rules of the court and not law of the land.

I have a question news media: When did the NMRA =
District Court=20
and other Court rule book become law or statute onto themselves with the =
power=20
to supersede statute and law and with so much power that they are looked =
unto by=20
Judges and lawyers as laws unto themselves even though not one of them =
have ever=20
been enacted into law or statute? How can a rule of court supersede =
statute and=20
be held above statute with the power to overrule statute? Summary =
Judgment is a=20
Rule of the court, created by judges and lawyers to skirt truth and real =

justice. When will the citizen of New Mexico see what attorneys and =
Judges have=20
done taking over their court system and take that control back away from =
the=20
Judges and the lawyers who seem to not have the citizens rights in mind? =
Who=20
watches the attorneys and judges? Why is it that judges seem to be =
screaming and=20
yelling at ordinary citizens who are seeking justice? Should we as =
ordinary=20
citizens be afraid of the courts and the Judges knowing that a fancy =
lawyer can=20

make a claims or accusation with no evidence to back such a claim or =
accusation=20
and get away with it? In the case number included in this brief you will =
find=20
specific examples of where a powerful lawyer has written their response =
to a=20
medical law suit, not a medical malpractice lawsuit, in which the =
attorney from=20
the very beginning makes not only bogus claim but out right un-provable =
and=20
false claims that have been brought to the judges attention without the =
judge=20
acting on one single one. If I went into court and lied throughout my=20
questioning whether in writing or not I would be put in jail. Why =
aren’t=20
the lawyers held to the same standards. I thought you, as the media, =
were at the=20
van guard always alert, always vigilant for the people. Then how did the =
lawyers=20
take control of the courts away from the people?

The purpose of this letter is as follows:

THE ATTORNEY REQUIRED TO APPROACH THE MEDICAL =
MALPRACTICE=20
COMMISSION PROVISION OF THE MEDICAL MALPRACTICE ACT Which denies =
individual=20
citizens their constitutional rights to approach the courts HAS BEEN =
DECLARED=20
UNCONSTITITIONAL IN CASE CV-98-00271 BECAUSE THEY DENY PLAINTIFF HIS=20
CONSTITUTIONAL RIGHTS TO APPEAR BEFORE THE COURTS. PLAINTIFF IS TRYING =
TO=20
DECLARE THE DISTRICT COURTS RULE BOOK WHEN IT SUPERSEDES LAW AND STATUTE =

UNCONSTITITUIONAL ESPECIALLY WHEN IT IS LOOK TO AS LAW AND STATUTE ONTO=20
THEMSELVES CREATED BY THE COURTS AND FOR ATTORNEYS AND NOT BY THE PEOPLE =
AND FOR=20
THE PEOPLE…

Even if you don’t look into case CV-98-00271 =
because of=20
how complicated it is, and it involves the Muscular Dystrophy =
Association=20
hospital clinic, which most media outlets support, Please, be at the =
next=20
hearing to see how the courts don’t look for truth and justice and =
have=20
become so influenced by attorneys.

How can a Albuquerque High School Graduate, not =
schooled in the=20
law, stand up Pro Se and fight a medical battle against a well =

entrenched=20
medical profession hell bent on defeating anyone who comes up against =
them, with=20
the same medical establishment having no interest in the truth about the =
persons=20
health nor does it want to do the medical testing to see if one of its =
own=20
created a knowingly and intentional false diagnosis? Why would =
physicians have a=20
code of silence to protect an individual doctor who is allegedly hurting =
the=20
very people the doctors claim they are helping? How can the same =
Albuquerque=20
High School graduate go out and find a medical expert who is willing to =
testify=20
that a Feb. 1995 diagnosis of plaintiffs medical condition as that of =
Limb=20
Girdle Muscular Dystrophy was a negligent misdiagnosis and that from the =
medical=20
evidence presented no doctor could have mistakenly diagnosed a disease =
as=20
extreme as Limb Girdle Muscular Dystrophy? That even though the two =
doctor in=20
the above named cased diagnosed and gave that diagnosis to the DDU of =
New Mexico=20
and Social Security, the Plaintiff may not be totally disable as the two =
doctors=20
claim? Was there any Medicare fraud as a direct result of the doctors =
alleged=20
false diagnosis and did the doctor collect Medicare payments knowing =
that the=20
patient did not have Limb Girdle Muscular Dystrophy and therefor may not =
have=20
ever been totally disabled even though the one doctor continued said =
disabled=20
diagnosis for over 15 years now? Is there Medicare and social security =
fraud=20
going on here? How dare that same High School graduate fight a battle =
against=20
injustice and indifference by the Court and is holding his owe against a =

powerful legal firm and legal precedent and think he will stand the test =
of=20
time? HOW CAN THAT BE? Who does he think he is to be demanding justice =
and his=20
right to the courts Pro se? Who does he think he is filing legal brief, =
notices=20
and motions against us, the establishment as if he is a lawyer, not =
concerned=20
with the rules of edict we attorneys have created for the courts to =

follow and=20
implement as we dictate? How can a Pro Se high school Graduate think he =
can=20
demand justice and think he can mention the word truth to the courts =
without=20
severe consequences against him? This Pro Se individual dares to not =
follow our,=20
the lawyers, lead in our endeavor to consume weeks and months on rules =
of the=20
court and not laws by daring to constantly mention the facts and truth =
of the=20
case? How dare him rock the boat of indifference and delays created by =
attorneys=20
so they can collect exorbitant amounts of money doing nothing? How dare =
this Pro=20
se individual approach the courts as an American citizen with =
inalienable rights=20
and not be afraid of the courts or the judge sitting on the bench or =
what we, as=20
attorneys, can get the judge to do to him? For we are friends of the =
Courts and=20
some of the judges and our opinions count. We fraternize with some of =
the Judges=20
unopposed with no fear that the media will ever question why we do that? =
We are=20
higher that military officers who are not allowed to fraternize with =
enlisted=20
personal? We are an entity unto ourselves, above examination by the =
media or=20
anyone else. For we are the Lawyers of the court. All normal citizens =
should be=20
afraid of what we, attorneys, can and will do to them if they dare =
challenge our=20
authority before the courts. All normal citizens should be afraid of =
what we are=20
doing to them and their rights behind closed doors unopposed by anyone =
or=20
agency? We can paper you to death and you will loose on rules not law. =
How dare=20
a Pro se individual go to the media and the public for help against us, =
the=20
establishment and status quo, asking for legal and maybe even financial =
help=20
thinking that the regular Joe cares one bit that we, the attorneys, have =
taken=20
control of the courts and will not let it go back to the people without =
a fight!=20
We are accountable to no one and we’ll milk you dry of all you =
have before=20
we throw you out like the garbage we think you are. The courts will do =

as we=20
dictate because we have written the book of rules the courts have made =
laws unto=20
themselves that supersede constitutionally created laws and statutes. =

I hope you the media will not throw this in the =
garbage and do=20
nothing for the people, but I must at least try. For if you just bother =
to read=20
the information in especially District Court case #CV-98-00271 you will =
see what=20
the above is about and how the lawyers have intentionally created a =
situation=20
that benefits them and only them. I NEED HELP.. Who will help if you=20
won't? One good thing about the computer revolution and especially =
the=20
chat rooms and news and newsgroups organization on the Internet, even if =
the=20
media chooses not to act, we still can get this out to the public.

I really don't understand, you are the media =
claiming=20
that you are helping to look out for the welfare of the community but =
have you=20
ever bothered to quietly and undercover sit in the District Court rooms =
of=20
Bernalillo and see the unbelievable attitude that some of the Judges on =
the=20
bench have towards the citizens of our state and how they are screaming =
and=20
yelling possibly threatening regular people who only want justice. Do =
you=20
periodically go undercover and sit in the various Court room to see for=20
yourselves the attitudes of the judges on the bench and how they treat =
the=20
people. Who monitors the Judges on the bench and their attitudes and the =

decisions that these judges are making? Do you even know or care what =
the Judges=20
are doing and saying? Have Judges become so bitter with the people for =
what=20
attorneys have done and continue to do unopposed that their attitudes, =
feelings=20
and ruling are being adversely affected against the people? Why =
haven't=20
the Judges been able to see through the theoretic and delay tactics =
Attorneys=20
have created? IS IT BECAUSE JUDGES ARE ATTORNEYS THEMSELVES? Trained in =
the=20
theoretic's of the show and not concerned with the law of the =
land. Does=20

justice grind slowly down the road to completion as Attorneys have =
claimed or do=20
attorneys intentionally create delays that the judges blame on the =
people? Why=20
cant the people take back control of the court room? Are Judges =
fraternizing=20
with attorneys, actually have coffee brakes with them, golfing with =
them? Why=20
would an attorney claim to be friends with a judge and claim that she is =
going=20
to have coffee with that judge? What is being discussed behind closed =
doors at=20
these claimed coffee's and are lives being ruin because of such=20
fraternizing? fraternization between a judge and a lawyer is a very =
dangerous=20
thing especially when that lawyer makes insinuated comments that =
she's=20
friends with the judge and she's off to have coffee with the =
judge-what=20
are these statements for? More importantly: are the Judges ruling =
being in=20
anyway influenced by any claimed friendships between a attorney and a =
Judge?=20
When a Judge is sitting on a bench judging a case at hand, does that =
judge look=20
at the attorney's and say blank is my friend and therefore he/she =
rulings=20
are being adversely affected by such a friendship? Is the court =
system=20
for the people, by the people and of the people or is it really as it =
looks, for=20
the lawyer, by the lawyer and of the lawyer? Look into this case and see =
how can=20
a lawyer do nothing for almost 2 years.

? Do you really think a court case can take 2 or more =
years=20
because justice moves slowly? Or is it intentional on the parts of =
attorneys to=20
intentionally delay and file one document at a time? Who fights for the =
people=20
and how do you put a stop to these and other intentional delaying =
practices=20
created by lawyers that serve no purpose for the client but does line =
the=20
attorneys pockets? Once a case has started there is no Court charges for =
filing=20
a motion in that pending case, yet lawyers are charging upwards of $500 =
to=20
thousands for each and every motion they file, even when then file =

motions a=20
piece at a time? To say that their time is that valuable and more =
valuable than=20
their clients is bull? 90% of all motions and notices and documents are =
created=20
by a lonely secretary who is not a lawyer and is not paid lawyers fees. =
When=20
will the courts have an accounting of what lawyers are doing and the =
charges=20
they are charging forcing an attorney to be accountable for the charges? =
Why=20
doesn't a lawyer have a log book logging in the exact amount of =
time he=20
spends on an individual case, stating the exact dates and time of day to =
justify=20
their exorbitant charges? Why is a lawyer allowed to charge that much =
and milk a=20
client dry? Who watches the lawyers?

TO WHOM IT MAY CONCERN, I AM NOT AN ATTORNEYS NOR DO =
I CLAIM TO=20
BE NOR DO I HAVE THE EDUCATION TO DO AN ATTORNEYS JOB but because of a =
medical=20
cover up intentionally created by the doctors in this case as testified =
to by=20
the doctors own written letter submitted as evidence in this case and =
ignored by=20
the courts and because of a false diagnosis given to social security and =
the=20
Disability Determination Unit of the State of New Mexico I have be =
saddled with=20
the disease of Limb girdle muscular dystrophy and claimed to be totally =
disabled=20
collecting over the past 15-20 years tens of thousands of dollars based =
on this=20
one doctor knowingly false diagnosis. Once this information was given to =
the=20
courts and social security in writing neither cared about the truth and =
social=20
security stated it was not their business for me to go to court. After =
the court=20
denied Defense attorneys motion to throw this case out of court and =
after the=20
judge declared the Attorney Required Provision of the Medical =
Malpractice act=20
unconstitutional, this case was sent to an arbitration meeting in which =
the=20
arbitrator attorney stated to plaintiff that if I was seeking truth and =
justice=20
I was at the wrong place. Even if the Court has the doctor written =

letter stated=20
he knew Plaintiff was not totally disabled and continued the diagnosis =
anyway=20
for decades passing that diagnosis to the DDU and Social Security, if =
you are=20
looking for justice and the truth you would not find it in a court of =
law. It=20
seem to me that court rules have become over law.

In case CV-98-00271 the Courts and attorneys have not =
mentioned=20
the word truth nor has it mentioned the facts in this case nor has it =
fought=20
over law and statute in this case for over two years. In fact in the =
majority of=20
the Defendants briefs and motions filed in this case, incorrect =
statements and=20
allegations are made with immunity from the court. Its as if the =
attorneys in=20
any case can simply write what they want even if what they write is not =
true,=20
has no baring on the case and has no evidence to support and when =
brought to the=20
courts attention, the court simply ignores the evidence. How can a case =
be=20
allowed to continue for over two years based on insinuation and not =
provable=20
statements from attorneys? All the arguments are centered around court =
rules,=20
summary judgment, discovery rules. When will the law be mentioned or the =
word=20
truth or the facts.

When will the Courts go back to what they were =
created for, to=20
judge the facts in a case, decide the truth from those facts and to =
dispense=20
justice based on those facts and not on the court rules book or lawyers=20
theoretical symphony training that was taught for the expressed purpose =
to sway=20
the courts, judges and jury even though it is only a act, trained by =
tricky=20
educators who know that symphony thoracic can most assuredly influence a =
judge=20
and a jury even though it is only a play or a Act on the attorneys part. =

Example: A person is video taped throwing a brick through a window =
severely=20
harming a person inside. That person without pressure writes that he did =
throw=20
the brick. For two years in court those facts are not look at or even =

mentioned=20
and the words looking for the truth has no baring on the case because =
lawyers=20
have the judge tied up on rules of the court that have no legislative =
backing.=20
With the lawyer for the accused actually trying to get the case thrown =
out of=20
court by summary judgment thereby never mention the truth in the case. =
More=20
importantly the person can actually get off without any justice simply =
based on=20
rules of the court even though their is video tape that the person =
actually=20
throw the brick through the window. That tape and the evidence has no =
baring in=20
court proceedings for over 2 years, why? More importantly, the attorneys =
in the=20
case are collecting exorbitant amounts of money for delay tactics and =
doing=20
nothing. The Miranda rights are good and do what they are intended to =
do,=20
protect the guilty and innocent from testifying against themselves. But =
if that=20
defendant is running around telling everyone he did it and more =
importantly the=20
court ain’t going to do shit, when does the injured parties right=20
supersede lawyers rules? Who created the District Courts Rule book and =
more=20
importantly are they legislative law? How does rules made up by judges =
and=20
lawyers for judges and lawyers become law unto themselves with the =
actual power=20
to supersede legally constituted laws and statutes with the ability to =
overrule=20
constitutional created laws and statutes?

Even though the New Mexico Supreme Court says that =
the District=20
Court Rule book is law and statute, carrying the same weight as law and =
statutes=20
and in fact superseding Law and statute constitutional CREATED by the=20
legislature with the ability to overrule constitutional implemented law =
and=20
statute, and in fact is placed above law and statute by the Judges of =
the Courts=20
with the power to supersede law and statute, no where can you find one =
single=20
rule of the District Court Rule book, including the summary Judgment =
rule,=20
legislated into law or statute by the legislative branch of the New =

Mexican=20
government. In the above mentioned case the Courts has used the Rule =
book of the=20
District Courts as laws unto themselves using them to decide decisions =
on=20
various issues from discovery to Summary Judgment without mentioning the =
clear=20
evidence in this case and without even knowing what statute apply to =
this case=20
and without ruling on the various Motion to Decide which Laws and =
statutes apply=20
to this case. How can a Judge decide that a Rule, as Summary Judgment =
is,=20
applies, when it has not decided on which statute governs this case even =
though=20
it asked for such a Motion to be filed. What I feel has happened is that =

Attorneys have influenced and so corrupted the Courts and the Judges =
that=20
somehow the Judges actually think that rules made up by attorneys for =
attorneys=20
and not for the people have been declared constitutional law by the =
Judicial=20
branch of the government and not through the constitutional elected =
legislative=20
branch. No where in any legislative created statute does the courts rule =
book=20
rules become law.

What I don’t understand is why the media, with =
claims=20
that they were created to look after the interest of the people, has =
been silent=20
on this vital issue. And I don’t understand why the media, who has =
the=20
power to influence the people into action, has not looked at the =
unbelievable=20
delaying tactics attorneys are using in court for the only reason but to =
collect=20
exorbitant amount of unjustified moneys for doing nothing but delaying? =
How does=20
a regular citizen even know that when the lawyer on the other side of =
the desk=20
is saying its going to take month, maybe even years for a final outcome =
in their=20
case, its not because justice moves slowly, it simply because the =
attorneys are=20
delaying the final outcome and intentionally filing one document at a =
time to=20
stretch the case out years because it is in their best interest =
financially to=20

do so. Medical experts who are hired to testify are doing the same =
thing. They=20
know certain test will be required to support their hired and paid for =
testimony=20
that could easily be done in days, they stretch down the road months by =
doing=20
one test at a time. Who stops the lawyers and experts? Who keeps a =
watchful eye=20
on them making sure they are not testifying for the money? Simple =
example: a=20
back x-ray from you back doctor cost $100 to produce and $200 for him to =

evaluate. A expert charges $500 for that x-ray and 1-5000 for his =
evaluation and=20
then more for is on bench testimony- why? Because the expert is strictly =
in it=20
for the money the lawyers can pay him with and not for truth or justice? =
Seems=20
to me that the courts should look at expert testimony with suspicion for =
what it=20
is, hired and paid for testimony and not the truth. If an expert is =
required,=20
and the law says one is required then why hasn't anyone taken that =

responsibly out of the hands of the lawyers and experts and put it into =
a=20
neutral hand with doctors and experts who have no financial gain to gain =
and=20
therefore testifies on the truth and not on paid slanted truth? Why=20
haven't you, the media, bothered to look at expert testimony for =
what it=20
really is. A expert who has prostituted his license and integrity for =
money and=20
only money? Will a expert look at a person damaged if that person has no =
money?=20
How can we the people stop the courts practices of using attorney hired=20
experts… Example: As the media know, social security disability =
Attorneys=20
are intentionally dragging out disability determinations decisions for =
12 months=20
to 2 years as standard practicing procedures, which decision could =
easily be=20
made in one month, because the lawyers get 33 and 1/3 percent of all =
back pay=20
and 331/3% of 1-2 years is quite a lot of money especially when they do =
nothing=20
but collect money.

Why has the court developed so many confusing rules =
and=20
regulations that a simple man can not approach the courts pro se? Do the =

judges=20
ask for an accounting of the amount the attorneys are charging and the =
delays=20
the attorney ask for? ARE ATTORNEYS WHAT THEY THINK THEY ARE, INITITIES =
ONTO=20
THEMSELVES? If a attorney is doing nothing and taking advantage of a =
clients=20
depression, who do you go to, to stop that attorney Second: Are judges=20
fraternizing with Attorneys and for what purpose? Are attorneys actually =
going=20
into Judges offices and sitting down and drinking coffee or tea with =
Judges and=20
shooting the shit as this one attorney claims? You know, the military =
has a very=20
important rule that Military officers are not allowed to fraternize with =

enlisted personal for a very good reason. So the look of even a partial =
amount=20
of favoritism will not be displayed. I think this rule applies here. =
Surely=20
Judges and Attorneys are not better than officers in the military. If =
Judges and=20
attorneys are claiming that nothing is going on then why the =
fraternization? If=20
these coffee and tea brakes are simply that, then why does this attorney =
go to=20
great length to mention that he/she are good friends with the particular =
Judge=20
and that they actually are off to have coffee with my dear friend? How =
do we=20
find out if there is such a rule against such fraternizing and if not =
who=20
regulates such fraternizing to be sure nothing improper is being done =
behind=20
closed doors? Who keeps an eye on those activities between Judges and =
attorneys?=20
A regular citizen, who has been harmed by a doctor and who covers up =
that harm,=20
should have no fear to approach a judge for help and no fear that their =
rights=20
will be trampled on because the opposing counsel is going to make sure =
that this=20
case is kept in the courts so long that it will ruin the damaged party=20
financially? Who is looking at the cost that attorneys are charging. A =
domestic=20
case that is filed cost at the most $200 to file. All Motion have no =
court=20
charges yet attorneys charge Upwards of $500 or more for supposedly =
Motions that=20
have no court charges and that may be one page long. Who does a regular =

citizen=20
go to, to find out if she is being taken advantaged off by a lawyer who =
know the=20
client is scared or in manic depression? Please Help?

Now back to my case still pending in court.

If what the doctor wrote in his 1995 and 1996 letters =
are true,=20
that he knew for decades that plaintiff was not totally disabled, the=20
implication are mind boggling. This doctor was and is instrumental in =
getting=20
plaintiff full disability social security benefits and continuing full=20
disability benefits for almost 20 years now even though he writes that =
he knew=20
for decades that plaintiff was not totally disabled but did not bother =
telling=20
anyone, including plaintiff, DDU, social security, other hospital, =
doctors.=20
According to the experts at the UNMH MDA Clinic this would indicate that =

plaintiff does not now nor has he ever had LGMD nor was plaintiff ever =
totally=20
disabled for almost 20 years now even though the doctor in this case =
continually=20
diagnosed it for 15 years with out one single medical test record to =
support his=20
diagnosis

The media needs to understand clearly this that the =
doctor=20
involved will not or can not produce one single medical or lab test =
report, one=20
single EMG test report, one single blood test report, one single muscle =
biopsy=20
test report that the two doctors claims they performed on plaintiff in =
Feb. 1995=20
and dates thereafter that they claim support their Feb. 1995 and date =
thereafter=20
false diagnosis of plaintiff medical condition as LGMD (Limb Girdle =
Muscular=20
Dystrophy) and total disability that they not only passed off as truth =
to=20
plaintiff, but also to Dr. Hamilton of the DDU, the DDU, and social =
security,=20
and if this same doctor will not or can not produce one single medical =
or lab=20
test report, one single EMG test report, one single blood test report, =
one=20
single muscle biopsy test report that he claims he did over a 15 or more =
year=20

period while he was plaintiff doctor that that kept this patient on =
total=20
disability social security and Medicare benefits for over 15 years and =
this same=20
doctor can not or will not produce one single medical record that =
supports his=20
15 or more year intentional and false diagnosis of plaintiffs medical =
condition=20
as LGMD and total disability that he knowingly and intentionally pass to =
the=20
DDU, DVR, social security, to keep his patient on total disability =
social=20
security benefits and Medicare.

"The implications are mine boggling: =
For years - This Doctor looked my family and me, the DDU and =
Social=20
Security straight in the eyes and knew he was lying and passing a false=20
diagnosis". That’s Why go =
public. If I=20
don’t the courts will continue to not worry about the truth and =
will keep=20
being consumed with its rules of court that the courts have elevated =
above law=20
and order and truth! I need help from you the media to get this out into =
the=20
public domain, to get it out of the shadows as it were so that no judge =
or=20
lawyer will be able to hid in the dark again.

Do you realize that there is a constitutional battle =
going on=20
in the District Court of Bernalillo county, Albuquerque, New Mexico, =
Dis. CT.=20
No. __CV-98-00271___, W. Daniel Schneider, presiding =
justice,=20
Over the attorney "Required" provision of the Medical =
Malpractice Act=20
and the RULES of the court especially what the court calls summary =
judgment,=20
that is slowly but surely headed for the U.S. Supreme Court. Do you =
realize that=20
an ordinary Albuquerque High and TVI School Graduate, has not only =
challenged=20
the District Court system, he has fought a fine fight "PRO SE" =
against=20
a powerful attorney establishment, getting Justice Schneider to declare =
the=20
"Attorney Provision of the Act" unconstitutional!

All either physician has to do is provide proof =
positive to=20
this court, plaintiff and the media that shows that either one of these=20
physicians bothered to do the bare minimum of medical and lab test, EMG =
test, in=20
Feb. 1995 and dates thereafter that they say supports their diagnosis of =
LGMD=20
and total disability that plaintiff can present to social security, the =
DDU and=20
the court and say see, I do have LGMD and am totally disabled and am =
legally=20
entitled to total disability benefits from social security for the rest =
of my=20
life and you can’t take it away or demand pay back. ITS THAT =
SIMPLE. Give=20
me proof that Dr. Gregg ever bothered to periodically re-evaluate my =
medical=20
condition despite several DDU, social security re-determinations that he =
was the=20
only doctor. That support the years of pain and suffering, hospital =
stays,=20
medicines, brain seizures, congestive heart failures, lost of home, =
wife,=20
potential. Please asked the doctors…

I asks this news organization to please at least go =
to the=20
court house and look up and read these cases records and especially all =
the=20
evidence placed before the judge and please present this case publicly =
to the=20
people so that the attorneys can not bury it under a pretense of =
innocence and=20
court rule. I am fighting an uphill battle that has grown very difficult =
to=20
fight. I ask the ordinary people out there who are seeking equal justice =
under=20
the law to Help. Medical experts and documents cost thousands. I am at =
my roads=20
end. Without your financial support the doctors will win by default and =
no=20
money.

Sincerely your,

Frank T. McMurtrey

10423 Valtierra Pl S.w.

Albuquerque, NM 87121

(505)836-2547

------=_NextPart_000_0004_01C01F04.D500BEE0--

2065. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C2585B.5398@wt.net>
Source record: 180684

Tom W8JI wrote:

>
> This is a good example of how all perspectives vary.
>
> Hamstick owners often consider their antennas good enuf.
> Hustler and Hamstick owners know the Hustler is better.
> People who have compared a Bugcatcher to a Hustler know the Bugcatcher
> is better.
>
> 73 Tom

The first mobile antennas I ever tried and used were bugcatchers. So everythng else I've tried is pretty much compared with them. They are a hard act to follow. I did pretty much match the bugcatcher performance with my "plastic bugcatcher" which is a modified hamstick, but with a bigger "bugcatcher sized" coil. But I really consider it a bugcatcher still in design. It's just lighter and made mainly of plastic. I have a friend who had a hustler setup on his car last summer. I had the "plastic bugcatcher".We both ran 100 watts on 75m. He had trouble even being heard clearly though the static. I was in the clear, no problem at all. And we were sitting about 10 ft apart out in the boonies. I don't know the db difference, but it was quite a bit. And I blame it on the hustler coil. I have one that came with a hustler vertical. I tested it, and tried with a mobile mast etc. It was terrible in comparison to a bug coil, or even my homemade ones. :< MK
--
http://web.wt.net/~nm5k

2066. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C26398.D1C4DB2B@eznec.com>
Source record: 180685

VE9SRB wrote:

> . . .
> It has been my opinion that the NEC "gain" numbers are really an indication
> of directivity, since radiation efficiency is presented as 100%. The
> radiation efficiency of the antenna will be a function of the ohmic losses
> in the wire. However, if you are comparing two antennas with similar
> resonant resistances and exactly the same wire length and wire diameter,
> this point becomes irrelevant.
> . . .

I may be misinterpreting this as a statement that wire loss can't be
included in an NEC-4 model. It can. It's done by use of the LD 'card'.
NEC-2 also has this capability.

Roy Lewallen, W7EL

2067. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C264A1.2C0709E5@eznec.com>
Source record: 180686

Reg Edwards wrote:
>
> Steve and Frac,
>
> Isn't this much ado about nothing ?
>
> From fundamental principles, it should be obvious a circular
> loop with a perimeter of 1/2-wavelength has a radiation
> resistance greater than, and a conductor resistance less
> than any shape, certainly a fractal shape, which may be
> contained within its circular area. Consequently the simple
> loop has the highest efficiency of all possible shapes
> having the same length of conductor. (All antennas having
> the same conductor diameter). . .

Neither of these is obvious to me. A dipole whose length is the less than or equal to the diameter of the loop will have a smaller conductor resistance than the loop, yet it can be contained within the loop's area. And would you please be so kind as to elaborate on the reasoning that leads to the conclusion that the radiation resistance of any enclosed shape has to be less than that of the loop?

Roy Lewallen, W7EL

2068. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Jttw5.216$Cq6.13482@bgtnsc04-news.ops.worldnet.att.net>
Source record: 180687

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39C26398.D1C4DB2B@eznec.com...
> VE9SRB wrote:
>
> > . . .
> > It has been my opinion that the NEC "gain" numbers are really an
indication
> > of directivity, since radiation efficiency is presented as 100%. The
> > radiation efficiency of the antenna will be a function of the ohmic
losses
> > in the wire. However, if you are comparing two antennas with similar
> > resonant resistances and exactly the same wire length and wire diameter,
> > this point becomes irrelevant.
> > . . .
>
> I may be misinterpreting this as a statement that wire loss can't be
> included in an NEC-4 model. It can. It's done by use of the LD 'card'.
> NEC-2 also has this capability.
>
> Roy Lewallen, W7EL

Roy:

My statements were based on modeling wires with no ohmic losses modeled. In
which case, directivity and gain are equal.

Steve, VE9SRB

2069. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C26913.BD2DE820@eznec.com>
Source record: 180688

ERP isn't in common use in the amateur community, at least for HF antennas, so I went to the IEEE definition, which I believe also represents common use. The IEEE refers it to a half wave dipole, so this means that Chip's antenna has 11 dB gain relative to a dipole. According to Lawson(*), you can't get this kind of gain even with a six element Yagi on a 1.5 wavelength boom.

What kind of antenna are you using that gives you this kind of gain? Some kind of fractal? How large is it?

Roy Lewallen, W7EL

(*) _Yagi Antenna Design_ by Dr James L. Lawson, W2PV, fig. 2.11, p. 2-21.

Fractenna wrote:
>
> IF I was running a KW, then my far field ERP would be close to 12,000 watts.
> . . .

2070. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39db7451.185014316@news.seanet.com>
Source record: 180689

On Fri, 15 Sep 2000 16:50:23 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>The performance comparison of the MI2 Fractal Loop and an arbitrarily chosen
>random wire geometry is complete. The conditions of comparison are as
>follows:
>
>Both antennas have exactly the same overall total wire length. In this
>case: 27.56 meters
>
>Both antennas occupy the same overall physical aperture size. In this case:
>2.80 meters by 2.66 meters.
>
>Both antennas have the same wire diameter: In this case: 0.64 cm
>
>Both antennas are symmetric about the X and Y axis. This is a reasonable
>condition for any loop antenna.
>
>Both antennas were modeled with NEC4. The validity of using NEC4 to model
>the MI2 Fractal Loop has been previously presented in a recent post. The
>NEC4 model of the MI2 Fractal Loop uses 500 wire segments. The NEC4 model
>of the random geometry uses 504 wire segments.
>
>The antennas were modeled to determine the first and third resonant
>frequencies, the resonant resistance, the 2:1 SWR bandwidth wrt 50 ohms for
>the first resonance and the directivity at both resonant frequencies.
>
>The Comparison:
>
> MI2 Random
>
>First Resonance: 15.749 MHz 15.403 MHz
>
>Resonant Impedance: 28.4 ohms 27.3 ohms
>
>Directivity: 2.14 dBi 2.13 dBi
>
>Bandwidth (%): 1.27% 1.17%
>
>
>Third Resonance: 28.65 MHz 28.105 MHz
>
>Resonant Impedance: 19.0 ohms 16.9 ohms
>

>Directivity: 4 dBi 5.8 dBi (see
>note below)
>
>Note: The directivity of the antennas are different simply due to differing
>pattern shape. Based on a quick review of the patterns, it would be
>unreasonable to conclude one to be "better" than the other.
>
>Conclusion: In my opinion, the performance of these antennas is so
>marginally different, it would be unreasonable to declare that one antenna
>performs better than the other. What is important however is the
>significance of the Fractal geometry as compared to a non-Fractal geometry.
>The performance of the loop antenna is more a function of the overall wire
>length and the compression of the structure about the feedpoint (aperture
>size) than the Fractal geometry. With the exception of radiation pattern
>performance as a function of increasing frequency, it is safe to conclude
>that the geometry of the antenna is less significant than these other
>factors. Although certainly interesting, the Fractal nature of the antenna
>geometry is not the significant factor in determining the antenna
>performance.
>
>Anyone interested in receiving GIF pictures of the antennas or the NEC
>files, please let me know.
>
>73,
>Steve, VE9SRB
>

Hi Steve,

Yes, include me in your distribution.

However, as to your conclusion above. By parts it makes sense, but it lacks a basic unifying statement; that, or at least for myself, I need it expressed perhaps at slightly greater length or in a different manner.

As a competitive design, unfortunately, you miss the small picture. It only takes tenths of a dB to bridge that microscopic gulf that separates your dog from the pillar of antenna design. ;-)

All praise that lofty gift and forever humble yourself in the presence of the fractal solution. (Its almost time for me to re-post the adventures of our fractal monk, lil grasshoppa).

73's
Richard Clark, KB7QHC

2071. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C27BDD.F0F9FE90@oltraining.com>
Source record: 180690

I would be interested in receiving the pictures and files.

Terry

VE9SRB wrote:

> The performance comparison of the MI2 Fractal Loop and an arbitrarily chosen
> random wire geometry is complete. The conditions of comparison are as
> follows:
>
> Both antennas have exactly the same overall total wire length. In this
> case: 27.56 meters
>
> Both antennas occupy the same overall physical aperture size. In this case:
> 2.80 meters by 2.66 meters.
>
> Both antennas have the same wire diameter: In this case: 0.64 cm
>
> Both antennas are symmetric about the X and Y axis. This is a reasonable
> condition for any loop antenna.
>
> Both antennas were modeled with NEC4. The validity of using NEC4 to model
> the MI2 Fractal Loop has been previously presented in a recent post. The
> NEC4 model of the MI2 Fractal Loop uses 500 wire segments. The NEC4 model
> of the random geometry uses 504 wire segments.
>
> The antennas were modeled to determine the first and third resonant
> frequencies, the resonant resistance, the 2:1 SWR bandwidth wrt 50 ohms for
> the first resonance and the directivity at both resonant frequencies.
>
> The Comparison:
>
> MI2 Random
>
> First Resonance: 15.749 MHz 15.403 MHz
>
> Resonant Impedance: 28.4 ohms 27.3 ohms
>
> Directivity: 2.14 dBi 2.13 dBi
>
> Bandwidth (%): 1.27% 1.17%
>
> Third Resonance: 28.65 MHz 28.105 MHz
>
> Resonant Impedance: 19.0 ohms 16.9 ohms

>
> Directivity: 4 dBi 5.8 dBi (see
> note below)
>
> Note: The directivity of the antennas are different simply due to differing
> pattern shape. Based on a quick review of the patterns, it would be
> unreasonable to conclude one to be "better" than the other.
>
> Conclusion: In my opinion, the performance of these antennas is so
> marginally different, it would be unreasonable to declare that one antenna
> performs better than the other. What is important however is the
> significance of the Fractal geometry as compared to a non-Fractal geometry.
> The performance of the loop antenna is more a function of the overall wire
> length and the compression of the structure about the feedpoint (aperture
> size) than the Fractal geometry. With the exception of radiation pattern
> performance as a function of increasing frequency, it is safe to conclude
> that the geometry of the antenna is less significant than these other
> factors. Although certainly interesting, the Fractal nature of the antenna
> geometry is not the significant factor in determining the antenna
> performance.
>
> Anyone interested in receiving GIF pictures of the antennas or the NEC
> files, please let me know.
>
> 73,
> Steve, VE9SRB

--

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2072. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <8ptu3t$u8o@r02n01.cac.psu.edu>
Source record: 180691

Hi Richard:

I have seen one. The battery that backed up our packet node here exploded after a lighting strike. It blew bits of the battery case all over our mountain top shack. And the acid stained the floor. Our take on what happened was the lighting caused a steam explosion in the battery by vaporizing the water in the battery.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:27534-39C236D2-21@storefull-114.iap.bryant.webtv.net...
> Don Jacobson wrote:
> "Upon a hit is my house at risk of an exploding car battery?"
>
> Not if reasonably protected from lightning.
>
> I`ve experience with countless battery powered microwave repeaters
> subjected to countless direct hits.
>
> Never heard of a battery explosion caused by lightning.
>
> Best regards, Richard Harrison, KB5WZI
>

2073. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pu021mnn1@plutonium.btinternet.com>
Source record: 180692

Roy, is it obvious we are considering only loops, such as magloops, (which may be cut into to make a feedpoint) which enclose an area in square metres or square feet ? A straight dipole encloses neither an area nor has any volume. It does not belong to the class of antennas within which comparisons may be made.

The radiation resistance of small loops, regardless of shape, is proportional to the square of the area enclosed. You can use Eznec to demonstrate this. Construct a lossless square loop with the ends almost touching, say 1 mm apart, half way along one side. Cut into it and feed it opposite the almost touching ends. We have dipole bent into the form of a square. Record feedpoint resistive component vs frequency and note relationship. Reducing frequency, of course, is same as decreasing loop perimeter in the same proportion and keeping the frequency constant, and is much more convenient to do with Eznec.

Anyway, every elementary text book including Terman tells the same story. I thought everybody knew this.

(The radiation pattern of a small loop isolated from ground is also very interesting).

In the present context the radiation resistance is the distributed value as is the conductor resistance. It can, of course, be transformed to any feedpoint.

It is necessary only to show that for a given length of conductor the area enclosed is a maximum, and so must be the radiation resistance, when the conductor is formed into a circle. Any other shape of the same perimeter length must have a smaller radiation resistance.

Since the loss resistance is proportional to the length of the perimeter it follows that a full circle antenna has the greatest possible efficiency for a given conductor diameter.

As loop perimeter increases the radiation resistance increases less rapidly. But at least up to the size of 1/2-wavelength perimeter the circular shape always wins the efficiency stakes. A hexagon is hardly any differerent. A square is not far behind. A fractal-ized loop I know not its shape. But one thing for certain it cannot be so efficient as the circle or square which encloses it. Or if

it encloses the same area its radiation resistance will be
the same but its perimeter and hence loss resistance must be
greater.

On the other hand, for a given perimeter and conductor
diameter there's hardly anything to choose between the whole
pack of 'em in terms of dB.

Reg

Roy wrote
> Reg Edwards wrote:
> >
> > Steve and Frac,
> >
> > Isn't this much ado about nothing ?
> >
> > From fundamental principles, it should be obvious a
circular
> > loop with a perimeter of 1/2-wavelength has a radiation
> > resistance greater than, and a conductor resistance less
> > than any shape, certainly a fractal shape, which may be
> > contained within its circular area. Consequently the
simple
> > loop has the highest efficiency of all possible shapes
> > having the same length of conductor. (All antennas
having
> > the same conductor diameter). . .
>
> Neither of these is obvious to me. A dipole whose length
is the less
> than or equal to the diameter of the loop will have a
smaller conductor
> resistance than the loop, yet it can be contained within
the loop's
> area. And would you please be so kind as to elaborate on
the reasoning
> that leads to the conclusion that the radiation resistance
of any
> enclosed shape has to be less than that of the loop?
>
> Roy Lewallen, W7EL

2074. Re: Mobile Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <39C28480.30A1E49B@arrl.net>
Source record: 180693

My Ford Ranger has ports with rubber plugs under the seats in the Cab.
I also found no good firewall places, so I went under the cab. Had to
remove a seat to run the cables under the carpet easily.

John KH7T

2075. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <u115ssglvpres4c2p35v4koge95h33ui4d@4ax.com>
Source record: 180694

Richard:

Darn! I guess it's going to have to be the dipoles, then. The fractal
will be too large for my location, and if it's directional, it'd have
to be on a 3D rotatable tower of some sort in order to get the
directivity to point the "beam" where you want it.

Maybe when I have my own place I'll be able to put up a tower and try
it out, but for now, the hidden dipoles are going to have to do.

Thanks again for the info and your time!

73's and good DX!

-Chris

On or about Fri, 15 Sep 2000 16:25:10 GMT, rwclark@seanet.com (Richard
Clark), using the forum rec.radio.amateur.antenna did say:
:Hi OM,
:
:Sorry, I threw one supreme curve ball your way with my recommendation
:for a "small" fractal.
:
:WRONG WRONG WRONG
:
:In fact I had simply steered you back to a large one. 16 meters
:indeed, that absurdity should have occurred to me as I was typing.
:
:I was pressed to polish up my work, answer your post, and get
:something to my site. I don't think I was firing on all three
:cylinders there. For another hit, qsl.net's ftp server appears to be
:down.
:
:So back to the "small" fractal solution. There still remain what I
:characterized as risk choices, but I'm afraid they would be very long
:shots.
:
:73's
:Richard Clark, KB7QHC

2076. US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Dave Moen <davemoen@mac.com>
Message-ID: <B5E7D3BF.F80%davemoen@mac.com>
Source record: 180695

Leading Phoenix, Arizona based company is hiring 20 Senior RF Engineers for full time positions.

The company is willing to relocate candidates but, will give a preference for Phoenix, Arizona based candidates.

Please, forward your resume with contact information for consideration to davemoen@mac.com

Will forward the job descriptions ASAP, as these positions just opened today the job descriptions will not be complete until later this afternoon.

2077. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pu1dj$ga8$1@plutonium.btinternet.com>
Source record: 180696

Steve, does that mean we've come to the end of Fractals on
this newsgroup ? How sad.

And couldn't the same conclusion have been reached a couple
of years back within 30 seconds and a few mental
calculations ?

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Steve concluded -

> Although certainly interesting, the Fractal nature of the
antenna
> geometry is not the significant factor in determining the
antenna
> performance.

2078. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <39C288F5.B6542592@cadvision.com>
Source record: 180697

Gray Frierson Haertig wrote:

> The biggest concern is having a long enough spike to penetrate the bark
> and get a good bite into the wood. This is why a spike for climbing a
> doug fir tree is longer than a spike for climbing a doug fir pole.
>
> Gray
>
> sideband@mindspring.com wrote:
> >
> > Dan Richardson wrote:
> >
> > > Yes, and tree climbing spikes are of different length depending upon
> > > the type of tree. For example spikes used on redwood trees are much
> > > longer than those use when climbing fir trees.
> > >
> > >
> >
> > I have never seen or used any spikes except pole spikes but that seems backwards
> > to me. Wouldn't you want longer spikes on softer wood for more stability? Does
> > this make sense?
>
> --
> Telecommunications Engineering
> Gray Frierson Haertig & Assoc.
> 820 North River Street, Suite 100
> Portland, Oregon 97227
> 503-282-2989
> 503-282-3181 FAX
> gfh@haertig.com

In other words, the bite must be worse than the bark!

--
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2079. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <17453-39C285AC-69@storefull-116.iap.bryant.webtv.net>
Source record: 180698

John Passaneau wrote:
"I have seen one."

If hit by lightning, it is easy to anticipate a battery explosion.
Batteries are usually easy to protect from lightning exposure.

A battery`s charge/drain path can contain a series inductance which
negates instantaneous current change and can contain shunt capacitances
which disallow an instantaneous voltage change. Breakdown devices then
have ample time to act, clamping the voltage to a safe value and
bypassing excess current around the batteries and connected equipment.

Best regards, Richard Harrison, KB5WZI

2080. Re: Whats a GOOD 10-80mtr. Dipole for trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39c28cc7$0$1350$45beb828@newscene.com>
Source record: 180699

W9INN antennas are very good. I bought one from Bill. Very well made,
great performance.

He is in Chicago area. Very (I mean very) small add in CQ and QST each month
near the back.

(I have not financial relationship with him other than he cashed my check for
his product).

He was on disability leave so he may be backed up but I just got my antenna
last week (ordered in early July). Give him a call; can't say enough.

How did I find him? I did the same post several months ago and many people
came back and recommended W9INN.

--jeffrey

In article <39C212F0.3C665CBD@snet.net>, bsanada01@snet.net says...
>
>Hi I am looking for a 10-80mtr. dipole antenna {NO LADDERLINE} for my
>backyard in the trees to use with coax where I can use up to 1KW of
>power what brand is GOOD, I have vertical HF antennas and want a wire
>antenna. Please let me know.
>
>Thank you Joe W1JAS...
>
>

2081. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000915171158.15307.00000729@ng-fi1.aol.com>
Source record: 180700

>Roy, is it obvious we are considering only loops, such as
>magloops, (which may be cut into to make a feedpoint) which
>enclose an area in square metres or square feet ? A
>straight dipole encloses neither an area nor has any volume.
>It does not belong to the class of antennas within which
>comparisons may be made.
>
>The radiation resistance of small loops, regardless of
>shape, is proportional to the square of the area enclosed.
>You can use Eznec to demonstrate this. Construct a lossless
>square loop with the ends almost touching, say 1 mm apart,
>half way along one side. Cut into it and feed it opposite
>the almost touching ends. We have dipole bent into the form
>of a square. Record feedpoint resistive component vs
>frequency and note relationship. Reducing frequency, of
>course, is same as decreasing loop perimeter in the same
>proportion and keeping the frequency constant, and is much
>more convenient to do with Eznec.
>
>Anyway, every elementary text book including Terman tells
>the same story. I thought everybody knew this.
>
>(The radiation pattern of a small loop isolated from ground
>is also very interesting).
>
>In the present context the radiation resistance is the
>distributed value as is the conductor resistance. It can, of
>course, be transformed to any feedpoint.
>
>It is necessary only to show that for a given length of
>conductor the area enclosed is a maximum, and so must be the
>radiation resistance, when the conductor is formed into a
>circle. Any other shape of the same perimeter length must
>have a smaller radiation resistance.
>
>Since the loss resistance is proportional to the length of
>the perimeter it follows that a full circle antenna has the
>greatest possible efficiency for a given conductor diameter.
>
>As loop perimeter increases the radiation resistance
>increases less rapidly. But at least up to the size of
>1/2-wavelength perimeter the circular shape always wins the
>efficiency stakes. A hexagon is hardly any differerent. A
>square is not far behind. A fractal-ized loop I know not

>its shape. But one thing for certain it cannot be so
>efficient as the circle or square which encloses it. Or if
>it encloses the same area its radiation resistance will be
>the same but its perimeter and hence loss resistance must be
>greater.
>
>On the other hand, for a given perimeter and conductor
>diameter there's hardly anything to choose between the whole
>pack of 'em in terms of dB.

This is basically a statement of the small loop approximation, which (INCORRECTLY) says that the radiation resistance of a small loop depends solely on the enclosed area and is thus not a geometry-dependent quantity.

For almost 5 years now, this small loop approximation has been shown to be wrong, through the work of Cohen and Hohlfeld. In fact, the RADIATION RESISTANCE of MI2 is HIGHER than that of the same sized small loop conventional wire loop.

This arises because MI2 incorporates 2 current max's, whereas the small loop has only one. The best that can be done with the small loop is to get a uniform current distribution.

Incidentally, I find it disturbing that I am getting 'hate' mail now (again! What is it with some of you guys!!) accusing me of being wrong; committing fraud; and so on, because of the fellow from Cushcraft's supposed results.

I haven't read his posts and won't, but I have been told he claims that any ARBITRARY origin-symmetric loop structure gives the same radiation resistance, resonance, and efficiency as MI2.

After the Open House I'll spend a minute or two giving just one counterexample that throws that bogus statement apart.

I will say that I spent a good part of a couple of years in the early 90's exploring just this issue of finding the best performing antenna for a given wire length in a small form factor.

He is clearly wrong. For anyone to say this, they cannot have a good handle on understanding:

* mutual coupling;
* resonance;
* ohmic loss;
* radiation resistance;
* field strength.

Using words like 'directivity' and 'impedance' are cop outs that deliberately avoid issues such as field strength and efficiency. I have no idea why someone who claims to do antenna work would use NEC4 to get directivity rather than field strength, or quote an impedance rather than a radiation resistance (at the current max).

Field strength is the salient observable.

I remind everyone that this Cushcraft person formally told us that he had a 20 turn spiral that had better 'directivity' than MI2. Of course it has a far lower field strength because it uses 4 to 5 times the amount of wire!

Gee! Tiny phased arrays have OODLES of directivity and boy do they stink!

Please: no more hate mail. It will get you into trouble.

73
Chip N1IR

2082. Re: Phrase for today

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39dd8ac4.190761580@news.seanet.com>
Source record: 180701

On 13 Sep 2000 19:20:38 +0200, wgewald@att.net wrote:

>x-no-archive:yes
>
>
>
>Ignotum Per Ignotius n.
> An explanation which is even more obscure than the
>thing it purports to explain. Literally, "the unknown by
>the more unknown."... For an example... see the
>...instructions for setting up and operating your
>[fractal flyer].

Hi All,

Another phrase courtesy of Oscar Wilde:

"It is a much cleverer thing to talk nonsense than to listen to it."

OR judging by the quality of some postings:

"There is only one thing in the world worse than being talked about,
and that is not being talked about."

OK OK enough, to finish where we began:

"Education is an admirable thing, but it is as well to remember that
nothing that is worth knowing can be taught."

73's
Richard Clark, KB7QHC

p.s.
taken from
http://www.jonno.com/oscariana/oscar.cgi
rwc

2083. Re: (none)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C2912C.6AEB87B2@mindspring.com>
Source record: 180702

Do you feel better?

Michelle Gutierrez wrote:

> This is a multi-part message in MIME format.
>
> ------=_NextPart_000_0004_01C01F04.D500BEE0
> Content-Type: text/plain;
> charset="iso-8859-1"
> Content-Transfer-Encoding: quoted-printable
>

snip of medical history

This has nothing to do with none.

2084. Re: Mobile Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C29264.4DD579CF@mindspring.com>
Source record: 180703

John Buck wrote:

> My Ford Ranger has ports with rubber plugs under the seats in the Cab.
> I also found no good firewall places, so I went under the cab. Had to
> remove a seat to run the cables under the carpet easily.
>
> John KH7T

I just ran my power cable through a rubber gromet in the firewall that a
bunch of other cables were already going through. Took about 5 minutes.

2085. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39C294BD.F776E1EF@attglobal.net>
Source record: 180704

HERE WE GO AGAIN with his bull shit.
You'd think that he'd be glad someone would take the time to stick up for him

Fractenna wrote:

> >I maintain a web sight for NEC. Send me the model and pix and I will
> >post it there. Please send it to NEC2@home.com The web page is
> >http://members.home.net/nec2
> >
> >
>
> Unauthorized images of MI2 constitute copyright infringement if you do as you
> suggest. If you wish a copy and use of the file and image(s), you can request
> so from:
>
> query@fractenna.com
>
> There are certain requirements of appropriate referencing and acknowledgement
> of the source and linking a site, to obtain this privelege. Also, you will be
> required to show evidence of likelihood of use (that is, some indication of
> likely web traffic).
>
> As far as I can tell, no one has ever downloaded or seen a NEC model on your
> site.
>
> 73
> Chip N1IR

2086. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <1yxw5.28007$qm4.610914@news-east.usenetserver.com>
Source record: 180705

Terrence R. Redding, Ph.D. wrote in message
<39C109D9.787DEAAB@oltraining.com>...
>I am considering building a single element quad antenna. The plane is
>to hang it like an inverted vee from the yard arm off the side of the
>tower and feed it with a 1:1 balun at the apex of the high point.

\
a single quad element is a useful wideband antenna. the main lobe "on axis"
gain exceeds that of a dipole over the range of about 0.5 L to about 1.8L,
where L is the noinal or design wavelength, ie, a wire which is one
wavelength long. Of course, to use this, you must hae a low loss
transmission line, open wire, ladder line or teflon coax, plus an antenna
tuner. If you don't mind the pattern change, the upper range goes to several
times the nominal; L.
Ive used a 20 Meter loop on the bands 12-30 meters many times.
w4mb

2087. N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000915184718.24691.00000173@ng-ci1.aol.com>
Source record: 180706

Since many of those coming are on this NG, let me just welcome you ahead. Glad you are coming:-)

Please make sure to park at the place indicated on the map, or you will be towed. And again, I'm sorry but I must restrict guests to those already signed up and approved. (Like Santa Claus, I have my list and I'm checkin' it twice:-) A recent death threat from W8JI, and other assorted hate mail, is about all anyone can humanly stomach. So please, no surprise visitors. Police take notice.

N1IR should be one the air sometime in that late morning, somewhere between 28490 and 28510 KHz. We will be using the 10M FQY seen on the ham page on:

http://www.fractenna.com

73
Chip N1IR

2088. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C2A863.6552C0F1@eznec.com>
Source record: 180707

Guess I'm being one of those nit-pickers. First, there was nothing in your statement (which I thought was directed largely at fractal antennas, some of which are closed and some not) which restricted it to loops. So it wasn't apparent to me that you were restricting the statement to closed loops. I also made the mistake of taking your statement about conductor loss literally. A smaller loop is "contained within its circular area", yet has smaller wire resistance. Apparently you meant that a round loop has the smallest conductor resistance of any loop containing the same area, which of course is true from basic geometric considerations. It's just not what you said.

About the radiation resistance claim. The only Terman book I have is _Radio Engineering_, Fourth Edition, and I couldn't find any discussion of small loop antennas in it, although I might have missed it. Kraus devotes a whole chapter to loops in _Antennas_. In it, he shows that a small circular loop and small square loop, each with uniform current, have the same pattern and radiation resistance provided they enclose the same area. I can't find where he applies the generalization to any shape loop as you have. The requirement for this equality between circular and square loops also depends on uniform current distribution, an assumption which begins becoming invalid at very roughly a quarter wave perimiter length. It's not hard to imagine a non-symmetrical loop shape like, say, a keyhole, which doesn't have uniform current distribution, so wouldn't fit the requirements (besides not being round or square). The relationship between the field from this and from a circular loop might depend in quite a different fashion on their enclosed areas. So although circular and square loops with uniform current have the same field strength and shape and same radiation resistance provided they have the same area, I haven't seen any evidence that this applies to any enclosed shape whatsoever. It isn't obvious to me that a fractal antenna, even though it would fit within a small loop, would necessarily have a uniform current distribution. But it isn't square or circular, either, so I don't believe we can make the assumption that its field will be the same as a circular loop enclosing the same area. If you're aware of an analysis that shows that the area rule is independent of shape, I'd appreciate knowing what it is so I could look it up.

It's easy to forget the conditions under which well-known rules are valid -- I got caught by this myself the other day.

Don't interpret this as a claim that a small loop can't be the most efficient antenna of its enclosed area. I just don't think it's "obvious" that it is, and don't think you've demonstrated that it is.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy, is it obvious we are considering only loops, such as
> magloops, (which may be cut into to make a feedpoint) which
> enclose an area in square metres or square feet ? A
> straight dipole encloses neither an area nor has any volume.
> It does not belong to the class of antennas within which
> comparisons may be made.
>
> The radiation resistance of small loops, regardless of
> shape, is proportional to the square of the area enclosed.
> You can use Eznec to demonstrate this. Construct a lossless
> square loop with the ends almost touching, say 1 mm apart,
> half way along one side. Cut into it and feed it opposite
> the almost touching ends. We have dipole bent into the form
> of a square. Record feedpoint resistive component vs
> frequency and note relationship. Reducing frequency, of
> course, is same as decreasing loop perimeter in the same
> proportion and keeping the frequency constant, and is much
> more convenient to do with Eznec.
>
> Anyway, every elementary text book including Terman tells
> the same story. I thought everybody knew this.
>
> (The radiation pattern of a small loop isolated from ground
> is also very interesting).
>
> In the present context the radiation resistance is the
> distributed value as is the conductor resistance. It can, of
> course, be transformed to any feedpoint.
>
> It is necessary only to show that for a given length of
> conductor the area enclosed is a maximum, and so must be the
> radiation resistance, when the conductor is formed into a
> circle. Any other shape of the same perimeter length must
> have a smaller radiation resistance.
>
> Since the loss resistance is proportional to the length of
> the perimeter it follows that a full circle antenna has the
> greatest possible efficiency for a given conductor diameter.
>
> As loop perimeter increases the radiation resistance
> increases less rapidly. But at least up to the size of
> 1/2-wavelength perimeter the circular shape always wins the
> efficiency stakes. A hexagon is hardly any differerent. A
> square is not far behind. A fractal-ized loop I know not
> its shape. But one thing for certain it cannot be so
> efficient as the circle or square which encloses it. Or if
> it encloses the same area its radiation resistance will be
> the same but its perimeter and hence loss resistance must be
> greater.

>
> On the other hand, for a given perimeter and conductor
> diameter there's hardly anything to choose between the whole
> pack of 'em in terms of dB.
> ----
> Reg
> --
> Roy wrote
> > Reg Edwards wrote:
> > >
> > > Steve and Frac,
> > >
> > > Isn't this much ado about nothing ?
> > >
> > > From fundamental principles, it should be obvious a
> circular
> > > loop with a perimeter of 1/2-wavelength has a radiation
> > > resistance greater than, and a conductor resistance less
> > > than any shape, certainly a fractal shape, which may be
> > > contained within its circular area. Consequently the
> simple
> > > loop has the highest efficiency of all possible shapes
> > > having the same length of conductor. (All antennas
> having
> > > the same conductor diameter). . .
> > >
> > Neither of these is obvious to me. A dipole whose length
> is the less
> > than or equal to the diameter of the loop will have a
> smaller conductor
> > resistance than the loop, yet it can be contained within
> the loop's
> > area. And would you please be so kind as to elaborate on
> the reasoning
> > that leads to the conclusion that the radiation resistance
> of any
> > enclosed shape has to be less than that of the loop?
> >
> > Roy Lewallen, W7EL

2089. 4 element yagi for 10 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Billy Young <youngbil@lcc.net>
Message-ID: <8pu7ug$bk0@atlas.lcc.net>
Source record: 180708

Hello,
I'm looking for plans to build a 4 element yagi for 10 meters. This is my first project and I'm looking for a simple design that won't leave with much guess work.

"73's"
Billy Young
KD5CSD

2090. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <79e5sscicqvvlqfv4sdl9hi37c2846b495@4ax.com>
Source record: 180709

Dave Moen <davemoen@mac.com>
shared these priceless pearls of wisdom:

->
->Leading Phoenix, Arizona based company is hiring 20 Senior RF Engineers for
->full time positions.

I don't think there are twenty Senior RF Antenna Engineers in the COUNTRY, much less in Phoenix. I doubt you can afford most of the ones I know who actually know what they are doing.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2091. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C2B971.A988D644@oio.net>
Source record: 180710

Fractenna wrote:
>
> Since many of those coming are on this NG, let me just welcome you ahead. Glad
> you are coming:-)
>
> Please make sure to park at the place indicated on the map, or you will be
> towed. And again, I'm sorry but I must restrict guests to those already signed
> up and approved. (Like Santa Claus, I have my list and I'm checkin' it twice:-)
> A recent death threat from W8JI, and other assorted hate mail, is about all
> anyone can humanly stomach. So please, no surprise visitors. Police take
> notice.
>
> N1IR should be one the air sometime in that late morning, somewhere between
> 28490 and 28510 KHz. We will be using the 10M FQY seen on the ham page on:
>
> http://www.fractenna.com
>
> 73
> Chip N1IR

Trolling for gate crashers?? Have no fear! I will NOT be
there.
'Doc
PS - I ~know~ I shouldn't do stuff like this, but look at it!
How can you resist?

2092. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39C2C677.5C0C9B51@attglobal.net>
Source record: 180711

OK Tom (and group), I'm learning a lot here, ...

1. What is a beverage antenna?
2. In lay terms, why does it work so well to the ground
3. What effect does his resistor in the end have (if any)
4. Does this work for transmission too or better for just reception?
For personal emails please remove the obvious

Thanks!
Wayne

Tom W8JI wrote:

> On 14 Sep 2000 11:59:01 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >You certainly can make a beverage. however, you'll need to keep the antenna as
> >straight as you can for best f/b . An inch or two droop isn't a problem for a
> >beverage, say, 10 feet off the ground. But a 3 or 4 foot droop is. Also, the
> >performance will very much depend on the uniformity of the ground.
> >GL!
> >73
> >Chip N1IR
>
> Hi Terry,
>
> You're low longwire could be considered a Beverage antenna.
>
> The information above is incorrect Terry. I have almost 30 Beverages
> here, and they make fine receiving antennas. There is very little
> difference in Beverage performance if you have belly in the spans.
>
> Here are some general guidelines:
>
> 1.) Keep the antenna reasonably straight and pointed in the direction
> you want to receive. A few degrees (say under fifteen degrees) of
> pathg deviation won't hurt as long as the antenna is generally
> centered on the direction you want to receive.
>
> 2.) At about 1-1/2 or 2 wavelengths, the directivity stops increasing.
> That's because ground losses below the antenna sap energy from the
> wire.
>
> 3.) Keep the Beverage low. The Beverage must be under about .02 WL
> high or you will start to loose directivity.
>

> At higher heights, the Beverage acts more like a long wire. You can
> use longer lengths of wire effectively.
>
> Like Doc, I think your wire is too small.
>
> You may not care about any of this, and just want to reel out your
> wire. Have fun.
>
> If you are serious about receiving weak signals, I suggest you do a
> Web search on Beverages or look at a copy of Low Band DXing by ON4UN.
>
> 73 Tom

2093. FracTriad

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <TdHCOViyKfHiigEBuXtBWEqg29bs@4ax.com>
Source record: 180712

Hello Dear Readers of the fractal Persuasion,

FracTriad is three offerings derived from one main fractal design. That main fractal design, a Koch second iteration triadic, is supported by three insulated guys that attach near the elevated feedpoint and travel downward to ground at an angle of 45 degrees. This basic construction is applied as three variations at two elevations. The simplest design variation, the Fractalope, is complete in its data and the remaining designs have "gaps." I will be closing up those gaps this weekend.

Your mission, should you care to accept it, is to construct the antenna:
1. For each guy, measure out from the feed point end as indicated in the Design Details and attach a tie-wrap (there are 16 - 17 spread over the three guys);
2. On the ground (never attempt to do this above ground) tie off the three guys to a common anchor and then spread them to three remote anchors that create a span of 45 degrees overall (the pictures will reveal all);
3. At the feed point end connect a 14.3 meter length of wire to your 1:1 Current BALUN. The BALUN should be mounted very near (if not at - or serve as) the guy's common attachment;
4. Pass the unconnected end through the loops already installed in step 1.
5. What follows has several options. Basically if you can establish the 45 degree spread and tension on all guys, you only need to attach the far end at the last tie-wrap. Or you can tie-wrap all 16 - 17 points. The advantage of the single attachment is it may give you flexibility if guy anchoring is problematic.

The five steps above are the not the complete drill, but they are the common steps for which ever design variation you decide to choose.

qsl.net's ftp server still appears to be down so I have posted the new pages at:
http://www.seanet.com/~rwclark/fractal/
and follow the links to "Practical Designs" (the first link at the top of the next page).

This is a work in progress. Incomplete. Redundant. Perhaps an error ;-)

73's
Richard Clark, KB7QHC

2094. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C2E082.5813062B@mindspring.com>
Source record: 180713

Chuck O'Neal wrote:

> Funny, my usually well informed sources state that this activity will
> not be attended at all!! Must be a rather good secret! (Fracky,you
> have some folks close around you that really can't stand your behavior)
>
> Please provide the open house details to this group, since you
> found it necessary to post to the "alleged" attendee's on this NG...

I have decided not to go.

2095. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C2EBE9.5EA6B093@bigfoot.com>
Source record: 180714

Tom W8JI wrote:
> It doesn't work "well" so far as gain goes. It is a rather lossy
> antenna, usually around 20 dB weaker than a full size antenna. For
> receiving that isn't important, because any lack of gain can be made
> up in a amplifier ahead of the receiver.

Can we say that even though it reduces the signal level, it reduces
the noise level even more thus increasing the S/N ratio?
--
http://www.mindspring.com/~w6rca

2096. Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: "SteveTheGeek - West Central, IN" <stevethegeek@newmail.net>
Message-ID: <ss5rdmn8h3t77@corp.supernews.com>
Source record: 180715

I'm into the planning stage of building a tower approx 100-120' high. Why so high you say?? I live in a woods and the average tree height around my property is 90'.

The biggest reason why I need such height is not because of ham radio (WHAT!?).

Granted, having that height would be very, very, excellent for ham, however I need the height for my DDS dish. The dish is unable to obtain the satellite signal ANYWHERE on my property at or near ground level. I just have too many tall SW trees...btw, I could cut a path but my half would kill me. SO my only other alternative is UP!!

Because that tower will protrude above the average treetop line, I am really concerned about my tower becoming a lightening rod. I looking for info about proper tower installation, grounding, etc.

This much I know: I am about 150' from the nearest powerlines and the tower will be approx 30' from my house. I will be able to hinge the tower for on-ground maintenance, but the only direction available (due to the trees) will be towards the powerlines.

Any suggestions? I could use ALOT of them. Never erected a tower before so this is a first for me..thx

Steve-N9MGB

2097. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C2FAD2.8EC50F18@eznec.com>
Source record: 180716

Sorry, I'm not interested in a contest, or in trying to prove that there's some better shape than a vertical. I was simply trying to find the basis for your earlier statement of the "obvious", since it wasn't at all obvious to me. That question has been answered.

Roy Lewallen, W7EL

Reg Edwards wrote:
> Roy, I can only repeat - use your own program Eznec or any later variant. Model any weird shape and size of loop you fancy.
>
> Should you find a shape of loop having the same or smaller perimeter than a standard 1/2-wave resonant circle but with a radiating efficiency greater than the circle please let us know.
>
> Constraints : - identical diameter copper conductors of the loop and the standard circle. The perimeter must not be greater than 1/2-wavelength. The standard circle is not a continuous loop but has a sawcut in it such that it is half-wave resonant as with a magloop without a tuning capacitor. The antenna must be remote from ground.
>
> The loop may be tuned by inserting a (lossless) capacitor in series as with a magloop.
>
> No restrictions in the manner in which the loop is fed but feeding arrangements need not be included in the model.
>
> The foregoing is of course hypothetical. Because I predict an inexperienced person searching for the holy grail would give up after 4 or 5 attempts and getting nowhere. As for you Roy, you will probably never start a task which you recognise as being an obvious waste of time before you click on the start button.
>
> It is obvious because, for example a 5-feet diameter standard circular loop, with a 2" diameter conductor, 1/2-wave resonant at 30 MHz, has a radiating efficiency of approximately 99.85 percent. Beat THAT with any other shape of conductor ! With what other shape would you start ? A square ? A fractal ?
> --

> --
> Regards from Reg, G4FGQ
> http://www.btinternet.com/~g4fgq.regp
> --

2098. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <goj3ss40jfbd8i7fq3m419aoo656g8h3gs@4ax.com>
Source record: 180786

You can do "word" documents in Linux.... WordPerfect for UNIX runs on
Linux, and it reads M$ Word documents. Hit Corel.com for the links, or
purchase at your neighborhood Office Max.

Just my two cents.

-SSB

On or about Fri, 15 Sep 2000 05:12:52 GMT, Patrick Jankowiak
<vaxhackery@REPLTILEatt.net.>, using the forum
rec.radio.amateur.antenna did say:

:That's quite a system. I'm trying to get an ISDN line to a friend of
:mine that has a business and a T1. Then at least I'd have 128K. I have
:an old MIPS workstation I'd like to use for browsing, with its huge
:glass and all. I'm using a nasty winoze 95 box for this, but I got it
:free from the trash.. The VMS stuff is what I'm trying to move
:towards, except of course when I want 'word' documents and such.. I do
:intend to use LINUX for web surfing and e-mail, but have only one
:system right now. I had a big ol' Sun rackmounted computer (forget the
:model#) but it has solaris on it. Sold it to a geeky character that
:wanted to read some 9-track tapes..
:
:sideband wrote:
:>
:> Oh, don't get me wrong, Patrick... I have several Linux systems, 2
:> NetBSD systems, and Ultrix running on an old DECstation 5000/200. Oh,
:> and there is that one ::cough:: ::splutter:: ::hack:: ::wheeze::
:> Winbloz98 box, but that's just for games and other fun stuff. ::grin::
:>
:> Basically, if I had a pipe big enough here to the house, and the
:> dialin equipment, I could be my own ISP. Webserver, FTP, Mail, DNS,
:> etc... all here, on different platforms, backed up, load balanced,
:> etc. ::grin:: Ok, I'm a geek, and I'm proud of it!
:>
:> VMS is nice... I wouldn't mind a copy of Solaris 2.6, for the
:> SparcStation 2... but that's just wishful thinking at this point.
:> ::grin::
:>
:> 73's
:>
:> -SSB
:>
:> On or about Mon, 11 Sep 2000 03:27:38 GMT, Patrick Jankowiak
:> <vaxhackery@REPLTILEatt.net.>, using the forum

:> rec.radio.amateur.antenna did say:
:>
:> :Well I might as well plug my favorite OS too.
:> :
:> :Linux is fun, but I prefer OpenVMS 7.2 for its security and
:> :robustness.
:> :VMS and all its applications are mow free to hobbyists (courtesy of
:> :Compaq) and it runs on the 64 bit Alpha processor, as well as older
:> :32 bit VAX machines. You can get a free license at
:> :www.montagar.com/hobbyist/
:> :
:> :Well, let us know how the system turns out. LINUX is getting better
:> :every day. I think Big Bill is worried.
:> :
:> :sideband wrote:
:> :>
:> :> I'd comment on this, but I'm busy compiling a new kernel for one of my
:> :> Linux boxes. For those interested, 2.2.17 was released a couple days
:> :> ago.
:> :>
:> :> 73's
:> :>
:> :> -SSB
:> :>
:> :> On or about 07 Sep 2000 00:32:52 GMT, fractenna@aol.com (Fractenna),
:> :> using the forum rec.radio.amateur.antenna did say:
:> :>
:> :> :>Anyway, better drop it; I know we are too far afield of antennas now, unless
:> :> :>we want to swing it around to some of the smart antenna systems that are
:> :> :>being deployed commercially. :-)
:> :> :>
:> :> :>73,
:> :> :>Ed
:> :> :
:> :> ::-)

2099. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <s8k3ssou5masgi6sbm4vr9ich7u55udm0q@4ax.com>
Source record: 180787

Mark:

Thanks for the ideas, and the information.

The whole point of this is for me to learn something. I'm not going to learn anything by trimming a bought antenna. I already know how to do that. ::grin:: As evidence, the coil loaded vertical dipole I have on the back of my car for 11M. It works well enough, but I need to get it higher, which means I need to get a longer threaded rod to mount it on, and set up some supports. But that's a different post, and a different topic.

I'm not into radio just to talk. The challenge of experimentation, the thrill of getting it right and being able to talk on it, the electronics knowledge gained, being legal to work on my own sets, etc, are the major reasons for my desire to become a HAM, and to build my own antenna.

I live in a basement apartment in a 2 story (3 with the basement) building. Right outside the "fire escape" window in the livingroom is a rather large pine tree. I was going to use this tree to "hide" my antenna from the landlord. He knows I'm going to be putting something up soon, and he knows I'm going to do my best to hide it as best I can. In the pine tree (a very large blue spruce) seems to be the best location, to me. I'm trying to decide between a pair of vertical dipoles (one for 10, and one for 11) or a fractal type, based upon real data, which Richard was kind enough to provide, and built by myself.

Dipoles are easy, now. I've built four of them. No challenge there. But the Fractal, which may indeed be broadbanded enough for my purposes, made out of steel electrical conduit, brazed together, and properly fed, and hung in the tree, might be another solution. The tree is, by my estimation, about 45 feet tall. I can probably get an antenna up about 40 feet in the tree. The bottom of the tree leaves another 4 or 5 feet showing, so my total length for an antenna is somewhere close to 35 feet. The dipoles will fit nicely in that space, but will the fractal? That data I haven't gotten yet.

At any rate, I'm encouraged by this openness and information. Hopefully I'll get this code thing licked, I'll get my desired vanity call, and you'll hear me calling CQ on 10m USB soon.

73's and good DX!

-SSB

On or about Fri, 15 Sep 2000 01:11:32 -0500, Mark Keith <nm5k@wt.net>,
using the forum rec.radio.amateur.antenna did say:

:sideband wrote:
:
:> Yes, 16 meters is a bit tall for an antenna. at this site. I had
:> gathered, and I must have been incorrect, that Fractals were small in
:> comparison to the height of, say, a dipole for the same frequency
:> range. When I do get on the air for real, I'm going to stay mostly
:> between 27.355 and 29.6?? Yes... that's 2.3~ Mhz bandwidth. I'm aware
:> that this can pose problems in antenna design, if I don't wish to use
:> a tuner.
:
:I'd just tune for one band or the other and use a tuner on the band not
:resonant. The loss from the tuner will be low as you are not looking at
:a really bad mismatch. I'd just find a good CB antenna, and use it for
:both bands. I'd tune it for the band I used the most, or possibly had a
:use for higher power. So if you ran 10m 75% of the time, and 11m 25%,
:I'd cut it for 10m, and slap a tuner inline for 11m. Heck, with these
:low power 4w AM/12w ssb radios, you might get away with a fairly high
:SWR.
:>
:> I prefer SSB as my mode of operation, as I've stated before, and I'm
:> not 100% sure which frequencies on 10M are acceptable for SSB, and
:> which are FM/AM/Other. Perhaps a bit more research on my part might
:> help narrow down my choices.
:
:If I remember right AM starts about 29 mhz. Most SSB use is from 28.300
:up to 28.9?? or so I guess. The tech pluses are good from 28.300 to
:28.500 with 200w output max. But this is not a novice sub band, as is
:the lower novice CW/data portion. So generals up can run up to 1500w
:anywhere except the CW novice subband. Everyone must run 200w in a
:novice subband.
:>
:> I consider a "safe" swr to be anything around 2.5:1 or lower. Maybe a
:> dipole set for the center of my desired transmit range would be the
:> better choice, using a tuner where necessary at the ends?
:
:It would be fine. But I prefer a good vertical for 10 m in general. The
:local coverage much better for one thing. MK
:>

2100. Re: Hide your antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <l0m3ssgosgp5orrej2kbdv2g8j5gmj3hvj@4ax.com>
Source record: 180788

Heh. I'm liberal with the elbow grease, conservative with the tension
on the trigger, and moderate in the powder charge.

That answer your question?

::grin::

-SSB
On or about Thu, 14 Sep 2000 22:17:10 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com>, using the forum rec.radio.amateur.antenna did
say:

:Only liberals actually clean their guns, real men shoot dirty weapons!
:
: Dirty Pistol
:
:--
:Peter O. Brackett
:Morrisville, NC

2101. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39C1E4F6.8353EE93@earthlink.net>
Source record: 180789

I have never heard of using radials with a loop/quad? For that matter, I have never heard of them being used with any balanced antenna--loop, dipole, yagi, quad, etc. My understanding is that radials form an electrical image plane that compensates for the "missing" half of a vertical monopole, somewhere for the current to travel on the other half of the cycle. Why would you need this with a dipole, or a loop? What purpose would it serve?

de Will KD7BFX

Yuri Blanarovich wrote:
>
> >I wonder, has anyone on in the newsgroup put up a single element quad
> >and compared it to an inverted vee?
> >
> >All responses appreciated.
> >
> >Terry
> >
>
> I used single element delta loop, (easier to fit on the tower). If you feed it
> at the top or the bottom in the middle, you get horizontal polarization (or
> with quad top/bottom corner/side feed) and at low heights radiation straight
> up. If you feed Delat loop 1/4 wave from the top apex you get vertical
> polarization and low angle radiation. By moving the feed point + - from the
> ideal position and by adjusting the height and length of the horizontal side
> close to ground, you can find 50 ohm point and direct feed with coax. With
> vertical polarization, good ground or bunch of radials will greatly enhance the
> performance at low angles. It beats inverted Vee in performance.
>
> Yuri, K3BU, PDH (pretty dumb ham)
>
> ps
> on this ham newsgroup there is no need for titles, corporate ladder places etc.
> We are all just PDH on the first name basis. (Except for one freak who flashes
> his "credentials" when people don't agree with his garbage.)

2102. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pspbp$9st$1@neptunium.btinternet.com>
Source record: 180790

Cecil, so you are still reading my stuff, eh?

Reg.

2103. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8psrp2$3uf$1@slb6.atl.mindspring.net>
Source record: 180791

Wow...

Finally Dr. Cohen seems to be posting some quantitative information on this NG now!

Sadly it is only in response to the efforts of Steve VE3SRB to actually present some quantative analysis/simulation results on a (fractal?) antenna.

Dr. Cohen's post seems to have a very "defensive" tone, I wonder why?

Steve, thanks for your modelling efforts, I for one, and I assume many of us NG participants appreciate your unselfish efforts in this regard. We have grown tired of the bafflegab, unprofessional and unscholarly approach to information sharing exhibited here by certain factions of the antenna design community.

Nuff said...

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000914200513.02807.00000012@ng-cr1.aol.com...
> >But I'd be very surprised to find any significant difference between
> >NEC-2 and NEC-4 results in modeling any fractal antenna. If anyone
> >observes a difference, I'd really appreciate your letting me know, and
> >sending me the NEC or EZNEC file. If a difference is seen, it's likely
> >that NEC-2 is being pushed to the edge of its ability in some respect.
> >NEC-4 holds in for a little longer at the fringes. (For example, NEC-4
> >will handle loops which are a bit smaller before giving bogus answers.)
> >
> >Roy Lewallen, W7EL
> >
>
> MOST fractal antennas * cannot* be modeled in NEC4 because of
width/segment
> length issues. However, the ones that I have published are amenable to NEC
> modeling, as are many limited iteration fractal wire antennas.
>
> Thus my exhortation withh the $1000 FRACTAL CHALLENGE. Frankly, I will be
very
> interested if any antenna beats the MI2, and if it does, I wonder what
kind of

> fractal it is:-)
>
> Here is the time scale and use of various NECS which I have used:
>
> 1994,1995 miniNEC
> 1995, 1997 NEC2
> 1997,2000 NEC4
>
> I would estimate I have about a man year or more using NEC in its various
> forms, although a lot of that was just waiting and thus doing other
things. In
> the early days of slow PC's that included sleeping!.
>
> NEC4 produces a different result than NEC2 because you can model more
segments.
> I ALWAYS oversample the current density, and use UNIFORM segment DENSITY
> (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT
NUMBERS
> PER WIRE!
>
> IMHO, anyone who uses NEC4 for gain values only-- does not incorporate
ohmic
> loss-- and uses uniform segment numbers per WIRE (even though wires are of
> different lengths) is not an experienced user of NEC4 ,and their results
cannot
> be taken with much credibility.
>
> I am especially struck by how many NEC users (with no commercial gui's) do
NOT
> incorporate ohmic loss. Why they just don't use EZNEC is beyond me. It's
not as
> if it is overpriced.
>
> (EZ)NEC4 produces models of field strength of about 1.9 dBi ,and well over
90%
> efficiency for MI2. I have found that inexperienced modeling still affords
> marginally reasonable approximations: the field strength is off 0.4 dB
or so
> (no biggie) BUT with resonances off by several percent. I consider that a
> problem, although others might not.
>
> All my results have been published. Readers are cautioned that incorrect
> observable values and references are not my responsibility and indicate a
lack
> of scholarly responsibility on the part of the poster.
>
>
> NC

2104. Re: 160/80M Vertical design question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <39c1f4e4_1@news.cybertours.com>
Source record: 180792

"Randall D. DuCharme" <randyd@NO-SPAMspecent.com> wrote in message
news:39C1A682.7DDBC549@NO-SPAMspecent.com...
> Greetings all,
>
> I'm contemplating building a dual band vertical for 160 and 80 meter
> use. I thought I'd try the simple, compact design I found in a book
> co-written by William Orr and Stuart Cowan (W6SAI and W2LX). They
> recommend using at least four 1/4-wave radials and four shorter ones
> run in random directions.
>
> I have an R7 that I use for 40-10 and am wondering how I could apply
> their design to my project antenna. That is, how can I get reasonable
> performance with my antenna using very short radials like my R7 does. (
> It really works well!!) Does anyone know how to build such a thing?
>
>
> Many thanks in advance.
>
>
> --
> Randall D DuCharme (KD5IZI)

Hi Randall and all,

The question you ask about making a 160/80m vertical using the same principal as the R7 Would be difficult to acheive on 160 and 80m , the R7 uses electrical 1/2 wave and the short radials are not true radials at all but what is know as decoupling stubs. on 160 for instance you'd have to have a vertical (full 1/2 wave would be 256 or so feet tall) and even then you'd still want a good ground plan unless you could get the base up about 1/4 wave (130 or so feet) above ground. Your best bet is to bite the bullet and laydown as many radials as you can. (note : you can shorten the vertical in height by using some form of loading , Coil, top hat etc. but it is a compromise . Antennas (for these lowbands most generally are a compromise of some sort) the trick is to get the best efficency and low angle take off, while putting the most of
your transmitting power to the either. And use a good receiving antenna.
Not to say that what you want can't be done. you'll just have to decide what your willing to trade off, to do it.
73 Dave , KC1DI

2105. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <39c1f752_1@news.cybertours.com>
Source record: 180793

"Terrence R. Redding, Ph.D." <terry@oltraining.com> wrote in message
news:39C109D9.787DEAAB@oltraining.com...
> I am considering building a single element quad antenna. The plane is
> to hang it like an inverted vee from the yard arm off the side of the
> tower and feed it with a 1:1 balun at the apex of the high point.
>
> I am guessing that it will out perform my current inverted vee, have a
> strong horizontal component of radiation, and be a fairly quiet antenna
> to listen on.
>
> I wonder, has anyone on in the newsgroup put up a single element quad
> and compared it to an inverted vee?
>
> All responses appreciated.
>
> Terry

Hi Terry ,
you should take a look at LB Cebik's fine analysis of Quad Loops at
http://www.cebik.com/radio.html

there you'll find lots of info on Loops and other antennas ,
73 dave kc1di

2106. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000915071758.06131.00000190@ng-fl1.aol.com>
Source record: 180794

>From: Gray Frierson Haertig gfh@haertig.com

>In a rather gross simplification of the actual
>process, laboratory animals were exposed to increasing levels of RF
>radiation until a change in behavior was noted. Using simulated tissue
>models, the Specific Absorption Rate (watts of energy absorbed per gram
>of tissue) was determined. The basic standard was set at one thousandth
>of this level.

The studies extended significantly past animal studies, of course. The level at which these types of problems was observed was 4 w/kG. The ultimate standard was, however, set at an SAR of one tenth of that level for controlled/occupational exposure and one fiftieth of that level for the unconcontrolled/general-public level.

See
http://www.arrl.org/news/rfsafety

for info and lots of linkage.

73,
Ed Hare, W1RFI

2107. KLM Log Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: James L Hall <trains@fidalgo.net>
Message-ID: <969017534.993859@mirror.fidalgo.net>
Source record: 180795

I need a manual or copy of, for KLM 13-30-7
Log Periodic Beam. Thanks for your help.

Jim K7OET

2108. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C20A33.F820F263@oltraining.com>
Source record: 180796

Excellent reference. I did and will use it to guide the construction of the loop, which now appears to be a delta, side fed at 1/6 along one side. Thanks again for pointing me in the right direction.

Terry - W6LMJ

KC1DI wrote:

> "Terrence R. Redding, Ph.D." <terry@oltraining.com> wrote in message
> news:39C109D9.787DEAAB@oltraining.com...
> > I am considering building a single element quad antenna. The plane is
> > to hang it like an inverted vee from the yard arm off the side of the
> > tower and feed it with a 1:1 balun at the apex of the high point.
> >
> > I am guessing that it will out perform my current inverted vee, have a
> > strong horizontal component of radiation, and be a fairly quiet antenna
> > to listen on.
> >
> > I wonder, has anyone on in the newsgroup put up a single element quad
> > and compared it to an inverted vee?
> >
> > All responses appreciated.
> >
> > Terry
>
> Hi Terry ,
> you should take a look at LB Cebik's fine analysis of Quad Loops at
> http://www.cebik.com/radio.html
>
> there you'll find lots of info on Loops and other antennas ,
> 73 dave kc1di

--

Terrence R. Redding, Ph.D. | over 90 Computer Courses
President/CEO | GED Courses
OnLine Training, Inc. | Insurance Agent Licensing
| Internet Services
http://www.oltraining.com | Web Broadcasting
| Web Site Design
(561) 357-0841 voice | Training Development
(561) 357-0842 FAX | Keynote Speaker
| SDL and Educational Research

2109. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000915080438.16369.00000356@ng-fm1.aol.com>
Source record: 180797

>For example, I have NO DXCC rating at all, and I am at least 20 dB
>louder than N1IR....anywhere...running 1 KW...
>

IF I was running a KW, then my far field ERP would be close to 12,000 watts.

Now: IF you were louder "anywhere" than me, BY 20 dB, then your ERP would be 1,200,000 watts.

That's 1,200,000 watts.!!!

Chuck--have you checked the minimum compliance distance on 10M for 1,200,000 ERP?

It sure sounds like a visit by the FCC would help you check your numbers properly, or reduce your ERP to acceptable levels.

73
Chip N1IR

2110. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C21035.A6C0EB68@oltraining.com>
Source record: 180798

I think I did that once -- just laid it on the ground. It didn't work very well.
A buddy of mine - WB5LOZ use to run phone patches from Vietnam using a 15 meter
dipole strung between a chain link fence and eve of a roof. All less then 10 feet
off the ground - and did quite well. I never understood that either.

Terry - W6LMJ

Fractenna wrote:

>
> >
> >Terry:
> >Try it. Test the length of wire without even bothering to terminate it.
> >That will give you some idea quickly how well it may work. Just lay it on
> >the ground if you can't support it at 5 - 10 ft. The height will just give
> >you
> >more (5 - 10 dB) input to your receiver, but as others have correctly
> >stated,
> >more than 10 ft or so up, it will start behaving like a longwire and the low
> >angle
> >response to DX drops.
>
> Gee....who said put it up more than 10 feet high on 160M?
>
> I speak from 30+ years of experience...no phd...
> >
> >73,
> >Chuck...K1KW
>
> Unfortunately you are incorrect in your generalizations. Depending on the
> ground type and uniformity, placing the wire on the ground will yield some to
> no retarded wave. The gain of the antenna will also drop severly, usually 20 db
> or more, not 5 or 10dB.
>
> Anyway, I think Terry SHOULD try your suggestion and then compare with the
> antenn up in the air.
>
> 73
> Chip N1IR

--

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(561) 357-0842 FAX | Keynote Speaker
| SDL and Educational Research

2111. Re: Is there an effective 75 meter mobile antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c2102a.9247068@news.akorn.net>
Source record: 180799

On Thu, 14 Sep 2000 22:26:35 -0500, Mark Keith <nm5k@wt.net> wrote:

>> The only antenna that has ever worked well for me on 75 meters phone,
>> while mobile, has been the Hustler with high power coil. I have
>> compared it to an 75 meter Yasu mobile antenna system and a Ham Stick.
>>
>> I believe the Texas Bug Catchers would work as well, but have never had
>> the opportunity to try one.
>>
>> Terry - W6LMJ
>
>The bugcatcher will outdo the hustler. Usually by a pretty good amount.
>But depends on how good/tall the bugcatcher is also. You have short
>ones/tall ones. The tall ones with good coils/hats hard to beat. The
>hustler 80m super resonator fairly lossy. MK
>--
>http://web.wt.net/~nm5k

This is a good example of how all perspectives vary.

Hamstick owners often consider their antennas good enuf.
Hustler and Hamstick owners know the Hustler is better.
People who have compared a Bugcatcher to a Hustler know the Bugcatcher
is better.

73 Tom

2112. Whats a GOOD 10-80mtr. Dipole for trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Joe & Bonita Sanada <bsanada01@snet.net>
Message-ID: <39C212F0.3C665CBD@snet.net>
Source record: 180800

Hi I am looking for a 10-80mtr. dipole antenna {NO LADDERLINE} for my backyard in the trees to use with coax where I can use up to 1KW of power what brand is GOOD, I have vertical HF antennas and want a wire antenna. Please let me know.

Thank you Joe W1JAS...

2113. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c21226.9754371@news.akorn.net>
Source record: 180801

On 15 Sep 2000 06:26:18 GMT, fractenna@aol.com (Fractenna) wrote:

>I am incapable of running a kilowatt under any conditions, so I assume you
>weren't referring to me.
>
>73
>Chip N1IR

Too bad you are incapable of displaying common sense.

73 Tom

2114. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c21320.10004922@news.akorn.net>
Source record: 180802

On 15 Sep 2000 05:42:53 GMT, fractenna@aol.com (Fractenna) wrote:

>>For example, I have NO DXCC rating at all, and I am at least 20 dB
>>louder than N1IR....anywhere...running 1 KW...
>>
>
>That is wrong--at least on the last two statements.
>
>Furthermore, if you are suggesting I am running 1 KW, can you explain how this
>is physically possible? I got the SB 220 back up this Summer, but I would like
>you to share what your sense is of how much power one can obtain, under ideal
>conditions, for output power on an SB220 on 10M, running on a 120V line.
>
>Are you familiar with the unit, or is your knowledge base limited to amplifiers
>with much higher outputs?
>
>73
>Chip N1IR

Having done designs for Heath, I'm familiar with the SB-220.

The SB-220 is capable of slightly more than a kilowatt out on ten
meters running on a 120 volt power source, or a 240 volt source.
Source voltage makes no difference, as long as the house has decent
wiring.

But then Chip should know that, since he is a "PhD".

The actual CW output was designed to be around 600 watts, but the amp
will do about twice that amount.

73 Tom

2115. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c214df.10452156@news.akorn.net>
Source record: 180803

On 15 Sep 2000 05:55:27 GMT, fractenna@aol.com (Fractenna) wrote:
>
>Unfortunately you are incorrect in your generalizations.

Chuck is pretty much correct.

>Depending on the
>ground type and uniformity, placing the wire on the ground will yield some to
>no retarded wave. The gain of the antenna will also drop severly, usually 20 db
>or more, not 5 or 10dB.

Beverages work OK laying right on the ground. Certainly a little
height is better, but most soils are lossy enough they work OK on
ground.

The main problem with laying the wire directly on the ground is the
attenuation in the wire increases. Who cares if the signal is -20dB
or -25 dB? Not anyone with a sensitive receiver!

73 Tom

2116. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c216a4.10904797@news.akorn.net>
Source record: 180804

On Fri, 15 Sep 2000 08:59:35 GMT, Will <gwelfster@earthlink.net>
wrote:

>I have never heard of using radials with a loop/quad? For that matter, I
>have never heard of them being used with any balanced antenna--loop,
>dipole, yagi, quad, etc. My understanding is that radials form an
>electrical image plane that compensates for the "missing" half of a
>vertical monopole, somewhere for the current to travel on the other half
>of the cycle. Why would you need this with a dipole, or a loop? What
>purpose would it serve?
>
>de Will KD7BFX

Hi Will,

The mental picture that a radial system provides an "image antenna"
is incorrect. It's a common mistake, even QST made that error in a
"Ask the Doctor" column.

The radials can do two things.

1.) The provide a second terminal for the feedline to "push" against.

2.) They "shield" the lossy dirt below the antenna from the strong
fields the antenna produces.

Because of effect number 2, they help the performance of any antenna
close to earth in terms of the wavelength and the antenna size.

73 Tom

2117. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NSow5.15422$6f1.676040@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180805

"Fractenna" <fractenna@aol.com> wrote in message
news:20000914200513.02807.00000012@ng-cr1.aol.com...
>
> NEC4 produces a different result than NEC2 because you can model more
segments.
> I ALWAYS oversample the current density, and use UNIFORM segment DENSITY
> (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT
NUMBERS
> PER WIRE!
>

This is reasonable and good advise, although not always practical because it is sometimes difficult to get all segments exactly the same length. Looking at your papers published in Comm Quart, it appears that you used 3 segments/wire in some cases and 4 wires/segment in some cases.

In most cases, I am more concerned about how the models react to changes in wire diameter.

>
> IMHO, anyone who uses NEC4 for gain values only-- does not incorporate
ohmic
> loss-- and uses uniform segment numbers per WIRE (even though wires are of
> different lengths) is not an experienced user of NEC4 ,and their results
cannot
> be taken with much credibility.
>

It has been my opinion that the NEC "gain" numbers are really an indication of directivity, since radiation efficiency is presented as 100%. The radiation efficiency of the antenna will be a function of the ohmic losses in the wire. However, if you are comparing two antennas with similar resonant resistances and exactly the same wire length and wire diameter, this point becomes irrelevant.

For the most part I try to use uniform segment lengths over the wire structure but it is not always possible to get exact segment lengths everywhere. In many cases, I use uniform segment numbers per wire and get acceptable results. If I am concerned about the results, I usually increase the segment density.

Just and FYI - As for credibility and experience, I have been running MOM models on antennas since about 1983.

I ran my NEC4 model of the MI2 loop with 3 segments/wire throughout the structure. The results were consistent with those presented in your papers

and I was not concerned about this issue. So that it is not an issue in future posts, I will adjust the number of segments/wire to match those indicated in your papers.

> All my results have been published. Readers are cautioned that incorrect
> observable values and references are not my responsibility and indicate a lack
> of scholarly responsibility on the part of the poster.
>
>

If this is an issue, the whole matter of model discrepancy could be resolved with your posting the EZNEC file for the MI2 Loop.

Thanks,

Steve, VE9SRB

2118. Re: will lightning explode storage battery?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: kinsler@frognet.net
Message-ID: <0Uow5.564$Cq3.2133@newsfeed.slurp.net>
Source record: 180806
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.chem.electrochem.battery,sci.electronics.basics,sci.engr.lighting,sci.engr.safety,sci.geo.meteorology

>lf you had a direct lightning strike, we're talking about MEGAvolts, and
>MEGA amps, both at the same time! This will kill any electrial equipment:
>period, if it dosen't set your house on fire.

Except when it doesn't. It turns out that a good many lightning strikes cause little or no damage to the equipment that is struck. The effects are highly variable: my guess is that damage is largely a function of the duration of the high voltage and current.

>On a lower level, the high electric fields stand a good chance of doing
>your computer gear serious damage. Unpluggging it all, including from the
>telephone line, will minimise the risk.

Well, both modems and computer power supplies get damaged, but for the most part they're surprisingly sturdy compared with other appliances in your home. Both have considerable built-in circuitry to limit overvoltages.

>If your backup systems involve car batteries, as do most, I commend you for
>your providence! And I assure you, that If you have a lightning strike of
>sufficient vigour to explode a lead-acid battery, that will be the least of
>your problems!

I agree, but there's always a certain amount of luck involved here. If, for example, there was a bit of hydrogen in the battery and a minor arc developed from even an indirect strike, it's possible that there could be some damage, though it's more likely that the vents in the battery case would handle the pressure increase.

>> Let's say I have a 12 volt car battery hooked indirectly to house current
>by
>> way of a backup lighting system that goes on if there's a power failure,
>> tc. --- or any other situation where lightning might get to a car
>battery...
>> upon a hit is my house at risk of an exploding car battery... acid/fire
>damage?

It's unlikely that even an exploded battery would start a fire, though it wouldn't improve your interior decoration much. Over their 120 year history, lightning hasn't been considered much of a threat to lead-acid storage batteries.

M Kinsler

--
512 E. Mulberry St. Lancaster, Ohio USA 43130
Voice: 740.687.6368 Fax: 740.687.6108
Home of the "How Things Work" engineering education program.
See http://www.frognet.net/~kinsler

2119. Re: Wanted: Stealthy Antenna Ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C21AD9.62814FBD@mindspring.com>
Source record: 180807

CAM wrote:

> "Terrence R. Redding, Ph.D." wrote:
> > Can you put up a shortened vertical built to look like an umbrella over
> > a yard table?
>
> There's a 40m version of exactly that on page 100 of Jerry
> Sevick's book, "Building and Using Baluns and Ununs".
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

Cool. If you sit under the umbrella you can talk and keep warm at the same time. :-)

2120. Re: Whats a GOOD 10-80mtr. Dipole for trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC804694478@www.indianarep.com>
Source record: 180808

I'm having very good results with the Alpha Delta DX-CC: Japan, Alaska, Argentina, Norway, Italy on 200w or less.
For the sake of experimentation, I am getting set to put up another dipole (42' by 94 ', a 4:1 balun fed with coax) to see what happens - I've been told that works pretty well, too. The DX-CC tunes fine with the xcvr's built-in tuner (Icom 775DSP) ,even on 17M (although just barely). I'm shopping for an external tuner for the other antenna.

Joe & Bonita Sanada <bsanada01@snet.net> wrote in message news:39C212F0.3C665CBD@snet.net...
> Hi I am looking for a 10-80mtr. dipole antenna {NO LADDERLINE} for my
> backyard in the trees to use with coax where I can use up to 1KW of
> power what brand is GOOD, I have vertical HF antennas and want a wire
> antenna. Please let me know.
>
> Thank you Joe W1JAS...
>

2121. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C21C4A.FD8DCC0D@mindspring.com>
Source record: 180809

Ahhh.. There the post is. It took 12 hours to show up on this server.

Fractenna wrote:

> >I maintain a web sight for NEC. Send me the model and pix and I will
> >post it there. Please send it to NEC2@home.com The web page is
> >http://members.home.net/nec2
> >
> >
>
> Unauthorized images of MI2 constitute copyright infringement if you do as you
> suggest. If you wish a copy and use of the file and image(s), you can request
> so from:
>
> query@fractenna.com
>
> There are certain requirements of appropriate referencing and acknowledgement
> of the source and linking a site, to obtain this privelege. Also, you will be
> required to show evidence of likelihood of use (that is, some indication of
> likely web traffic).
>
> As far as I can tell, no one has ever downloaded or seen a NEC model on your
> site.
>
> 73
> Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you
for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I
refuse to use a
spell checker and don't take criticism well.

2122. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c21b47.12091847@news.akorn.net>
Source record: 180810

On 15 Sep 2000 12:04:38 GMT, fractenna@aol.com (Fractenna) wrote:

>IF I was running a KW, then my far field ERP would be close to 12,000 watts.

Only if your antenna is as efficient as you claim and had the energy
focused correctly.

>Now: IF you were louder "anywhere" than me, BY 20 dB, then your ERP would be
>1,200,000 watts.
>That's 1,200,000 watts.!!!

I went throiugh the same exercise with a fellow using a poor antenna.
He accused me of running big power, because I beat him by 20-30 dB.

In reality, he had an antenna performance shortfall he wouldn't admit,
plus many S meters were showing a bit more difference than actually
occured.

It's not unusual for a well-engineered station like Chucks to beat a
tinker-toy station like yours by 20 dB.

>It sure sounds like a visit by the FCC would help you check your numbers
>properly, or reduce your ERP to acceptable levels.
>73
>Chip N1IR

Here's how Chip's call would go......

"Hello FCC"

"FCC , this is Nathen Cohen PhD. Chuck is beating my Fractal antenna
on ten meters and I want you to drive over there and check his power.
According to my math, he is running over a million watts ERP."

"(snicker) Dr. Cohen ehhh? The guy on Rec dot radio dot amateur dot
antenna? The one who uses 10 log for voltage decibels?"

"Yes, that's me. I demand you investigate him"

"We'll get right on it Doctor Cohen (chuckle)" "click" huummmmmmmmmmm

The next action taken by the FCC will be hiring a new engineer, to
replace the one who mysteriously died laughing.

73 Tom

2123. Re: Best Wire for Buried Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C22041.AD9B2ECA@bigfoot.com>
Source record: 180811

Reg Edwards wrote:
> Cecil, so you are still reading my stuff, eh?

It sure beats watching my puts expire.
--
http://www.mindspring.com/~w6rca

2124. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C22226.1950583A@bigfoot.com>
Source record: 180812

sideband wrote:
> But the Fractal, which may indeed be broadbanded enough for my
> purposes, made out of steel electrical conduit, brazed together, and
> properly fed, and hung in the tree, might be another solution.

I may be wrong, but I think the fractal antenna being discussed
is directional, unlike an ordinary 1/4WL vertical, so some means
of rotating it may be necessary for all-directional coverage.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2125. UKW AND Dipol or YAGI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Robert Bukowski <robert.bukowski@gmx.at>
Message-ID: <39C2258F.1F913ABB@gmx.at>
Source record: 180813

I have written about my problem in this NG about 3 weeks ago and
it is not solved up to now. Now to my problem:
I am living in Vienna/Austria/EUROPE in the first district. In the house

where I live there is installed a common antenna-equipment for radio
(UKW),
TV (1xVHF, 2x UHF) and two satellite-dishes (Satellites ASTRA and
HOTBORD).
To the switch-boxes (SPAUN, Made in Germany) are connected ten
customers,
whereby only one cable is leading to each participant. I do explain this
in such a
depth because I don't know if this is usual in this way in other
countries especially
in USA.
All the satellite and TV reception is excellent but there is a problem
with UKW.
I do want to receive a radio-station, FUN-Radio
(http://www.funradio.sk), which
is located about 40 miles away in Bratislava/Slovakia. Thus I have
installed an
UKW-Yagi consisting of 7 elements looking that direction. The antenna is
mounted
horizontally, whereas FUN-Radio is transmitting vertically. With that
antenna I get
a signal of 46 dB and the local radios have a signal of 78 dB. That 78
dB are too strong
for the other signals, so I have to lower the complete UKW-Signal bay 6
dB. By doing
this FUN-Radio gets noisy.
At the same time another radio-station, ï¿½3 (66dB), which transmitts in
an angle of about 120ï¿½
away from Bratislava has some sizzling.
My idea would be now to replace the horizontally YAGI by a simple
vertically dipol mounted
on a boom and still looking at Bratislava. This should strengthen the
signal by 15 dB and the
sizzling-problem should also be solved, because there shouldn't be the
problem with different
incoming phasis because of the vertically orientation of the dipol.
However some experts are saying that the polarization should have nearly
no effect in such
a distance to the transmitter.
Please tell me your opinions about it because experimenting would be too

expensive to me
as I am not willing to make the installation by myself because I do not
dare to got out on
the shelter by myself.
Thx
Robert

2126. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pt8ojgaj1@uranium.btinternet.com>
Source record: 180814

Steve and Frac,

Isn't this much ado about nothing ?

From fundamental principles, it should be obvious a circular loop with a perimeter of 1/2-wavelength has a radiation resistance greater than, and a conductor resistance less than any shape, certainly a fractal shape, which may be contained within its circular area. Consequently the simple loop has the highest efficiency of all possible shapes having the same length of conductor. (All antennas having the same conductor diameter).

There comes a series of regular polygons in between circle and square all with the same length of perimeter. All of which will have greater efficiencies than a fractal contained within the same area. And if a fractal has a greater bandwidth it is only because it is less efficient.

SWR versus the completely arbitrary value of 50 ohms is meaningless in the present context. A loop can be matched to a wide variety of impedance lines.
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

VE9SRB <srbest@worldnet.att.net> wrote in message news:NSow5.15422$6f1.676040@bgtnsc05-news.ops.worldnet.att.net...
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000914200513.02807.00000012@ng-cr1.aol.com...
> >
> > NEC4 produces a different result than NEC2 because you can model more
> segments.
> > I ALWAYS oversample the current density, and use UNIFORM segment DENSITY
> > (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT
> NUMBERS
> > PER WIRE!
> >
>

> This is reasonable and good advise, although not always
practical because it
> is sometimes difficult to get all segments exactly the
same length. Looking
> at your papers published in Comm Quart, it appears that
you used 3
> segments/wire in some cases and 4 wires/segment in some
cases.
>
> In most cases, I am more concerned about how the models
react to changes in
> wire diameter.
>
> >
> > IMHO, anyone who uses NEC4 for gain values only-- does
not incorporate
> ohmic
> > loss-- and uses uniform segment numbers per WIRE (even
though wires are of
> > different lengths) is not an experienced user of NEC4
,and their results
> cannot
> > be taken with much credibility.
> >
>
> It has been my opinion that the NEC "gain" numbers are
really an indication
> of directivity, since radiation efficiency is presented as
100%. The
> radiation efficiency of the antenna will be a function of
the ohmic losses
> in the wire. However, if you are comparing two antennas
with similar
> resonant resistances and exactly the same wire length and
wire diameter,
> this point becomes irrelevant.
>
> For the most part I try to use uniform segment lengths
over the wire
> structure but it is not always possible to get exact
segment lengths
> everywhere. In many cases, I use uniform segment numbers
per wire and get
> acceptable results. If I am concerned about the results,
I usually increase
> the segment density.
>
> Just and FYI - As for credibility and experience, I have
been running MOM
> models on antennas since about 1983.

>
> I ran my NEC4 model of the MI2 loop with 3 segments/wire
throughout the
> structure. The results were consistent with those
presented in your papers
> and I was not concerned about this issue. So that it is
not an issue in
> future posts, I will adjust the number of segments/wire to
match those
> indicated in your papers.
>
> > All my results have been published. Readers are
cautioned that incorrect
> > observable values and references are not my
responsibility and indicate a
> lack
> > of scholarly responsibility on the part of the poster.
> >
> >
>
> If this is an issue, the whole matter of model discrepancy
could be resolved
> with your posting the EZNEC file for the MI2 Loop.
>
> Thanks,
>
> Steve, VE9SRB
>
>
>

2127. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C2247A.B6DFE57E@bigfoot.com>
Source record: 180815

Terry Redding wrote:
> Excellent reference. I did and will use it to guide the construction of the
> loop, which now appears to be a delta, side fed at 1/6 along one side.
> Thanks again for pointing me in the right direction.

Also take a look at: http://people.delphi.com/cecilmoore/rect80m.htm
on my web page.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2128. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8pt9eq$c0m$1@iac5.navix.net>
Source record: 180816

Translation: I can pick more fly crap out of pepper than you can...

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> Was heard to mutter>

> All my results have been published.
> Readers are cautioned that incorrect
> observable values and references are not
> my responsibility and indicate a lack
> of scholarly responsibility on the part of the poster.
>
>
> NC

2129. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: carkenord@juno.com
Message-ID: <8ptas8$q1m$1@nnrp1.deja.com>
Source record: 180817

I am using an equilateral triangle, made of wire, on 20M. The apex is up, apex at about 44 feet. Its fed in the middle of the base / bottom. No balun..... I use a quarter wave of 75 ohm coax between the antenna feedpoint and the 50 ohm coax feedline. I can turn this antenna.

It easily outperforms an inverted V with apex also at 44 feet.

I tried feeding it at the corner of the base. It seemed noisier, and I had this vague feeling that it just didn't perform as well overall as feeding in the center of the base. Corner feed is also more cumbersome to rotate. I use this antenna mostly for chasing DX. It is very definitely directional. If you construct something like this, make damn sure you make it so you can rotate it.

Lee Carkenord KA0FPJ

In article <39C109D9.787DEAAB@oltraining.com>,
terry@oltraining.com wrote:
> I am considering building a single element quad antenna. The plane is
> to hang it like an inverted vee from the yard arm off the side of the
> tower and feed it with a 1:1 balun at the apex of the high point.
>
> I am guessing that it will out perform my current inverted vee, have a
> strong horizontal component of radiation, and be a fairly quiet
antenna
> to listen on.
>
> I wonder, has anyone on in the newsgroup put up a single element quad
> and compared it to an inverted vee?
>
> All responses appreciated.
>
> Terry
>
> --
> -----------
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>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2130. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ujqw5.28943$M37.671637@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180818

Hi Reg:

>
> Isn't this much ado about nothing ?
>

In the grand scheme of things, YES!

On the other had, a good discussion of differing technical opinions is
always enjoyable.

73,
Steve

2131. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:05:13 UTC
From: fractenna@aol.com
Message-ID: <20000914200513.02807.00000012@ng-cr1.aol.com>
Source record: 180767

>But I'd be very surprised to find any significant difference between
>NEC-2 and NEC-4 results in modeling any fractal antenna. If anyone
>observes a difference, I'd really appreciate your letting me know, and
>sending me the NEC or EZNEC file. If a difference is seen, it's likely
>that NEC-2 is being pushed to the edge of its ability in some respect.
>NEC-4 holds in for a little longer at the fringes. (For example, NEC-4
>will handle loops which are a bit smaller before giving bogus answers.)
>
>Roy Lewallen, W7EL
>

MOST fractal antennas * cannot* be modeled in NEC4 because of width/segment length issues. However, the ones that I have published are amenable to NEC modeling, as are many limited iteration fractal wire antennas.

Thus my exhortation withh the $1000 FRACTAL CHALLENGE. Frankly, I will be very interested if any antenna beats the MI2, and if it does, I wonder what kind of fractal it is:-)

Here is the time scale and use of various NECS which I have used:

1994,1995 miniNEC
1995, 1997 NEC2
1997,2000 NEC4

I would estimate I have about a man year or more using NEC in its various forms, although a lot of that was just waiting and thus doing other things. In the early days of slow PC's that included sleeping!.

NEC4 produces a different result than NEC2 because you can model more segments. I ALWAYS oversample the current density, and use UNIFORM segment DENSITY (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT NUMBERS PER WIRE!

IMHO, anyone who uses NEC4 for gain values only-- does not incorporate ohmic loss-- and uses uniform segment numbers per WIRE (even though wires are of different lengths) is not an experienced user of NEC4 ,and their results cannot be taken with much credibility.

I am especially struck by how many NEC users (with no commercial gui's) do NOT incorporate ohmic loss. Why they just don't use EZNEC is beyond me. It's not as if it is overpriced.

(EZ)NEC4 produces models of field strength of about 1.9 dBi ,and well over 90% efficiency for MI2. I have found that inexperienced modeling still affords marginally reasonable approximations: the field strength is off 0.4 dB or so (no biggie) BUT with resonances off by several percent. I consider that a

problem, although others might not.

All my results have been published. Readers are cautioned that incorrect observable values and references are not my responsibility and indicate a lack of scholarly responsibility on the part of the poster.

NC

2132. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 00:36:06 UTC
From: fractenna@aol.com
Message-ID: <20000914203606.08246.00001058@ng-mf1.aol.com>
Source record: 180769

>I maintain a web sight for NEC. Send me the model and pix and I will
>post it there. Please send it to NEC2@home.com The web page is
>http://members.home.net/nec2
>
>

Unauthorized images of MI2 constitute copyright infringement if you do as you suggest. If you wish a copy and use of the file and image(s), you can request so from:

query@fractenna.com

There are certain requirements of appropriate referencing and acknowledgement of the source and linking a site, to obtain this privelege. Also, you will be required to show evidence of likelihood of use (that is, some indication of likely web traffic).

As far as I can tell, no one has ever downloaded or seen a NEC model on your site.

73
Chip N1IR

2133. Re: Antenna on a telephone pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 01:14:50 UTC
From: X@Y.Z.net
Message-ID: <slrn8s2u08.cdi.X@animas.frontier.net>
Source record: 180770

In addition, on a redwood you have to drive thru some pretty thick bark.

On Thu, 14 Sep 2000 15:08:43 -0500, sideband@mindspring.com scribbled:
>Ok. My theory was good but my knowledge of trees sucks. I thought redwood was hard
>and dense and fir was soft. Maybe I was thinking of fur. :-)
>
>Roy Lewallen wrote:
>
>> Makes sense to me. Redwood is very soft. Douglas fir, which I understand
>> isn't really a true fir, is much harder and more dense. I don't know
>> about true firs like Grand or White fir, but I'd be pretty sure they're
>> harder than redwood, too.
>>
>> sideband@mindspring.com wrote:
>> >
>> > Dan Richardson wrote:
>> >
>> > > Yes, and tree climbing spikes are of different length depending upon
>> > > the type of tree. For example spikes used on redwood trees are much
>> > > longer than those use when climbing fir trees.
>> >
>> > I have never seen or used any spikes except pole spikes but that seems backwards
>> > to me. Wouldn't you want longer spikes on softer wood for more stability? Does
>> > this make sense?

2134. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 02:47:48 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <o5gw5.75745$NH2.597373@typhoon.ne.mediaone.net>
Source record: 180773

DXCC has NOTHING to do with antenna performance...
so let's not be fooled by more obfuscation...

For example, I have NO DXCC rating at all, and I am at least 20 dB
louder than N1IR....anywhere...running 1 KW...

The guy that had the highest DXCC # ran only dipoles and 100 W...,
a W1...anyone know who that was???

2135. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 02:47:54 UTC
From: fractenna@aol.com
Message-ID: <20000914224754.24388.00000001@ng-fc1.aol.com>
Source record: 180771

>> NEC4 produces a different result than NEC2 because you can model more
>segments.
>> I ALWAYS oversample the current density, and use UNIFORM segment DENSITY
>> (number of segments per unit length) per wire. NEVER UNIFORM SEGMENT
>NUMBERS
>> PER WIRE!
>
>>. . .
>
>I concur with the advice about segment length.
>
>I haven't done very much modeling with native NEC-2, but believe it can
>handle 10,000 segments, if properly compiled for that value, just as
>NEC-4 will. (The limitation is really due to internal use of numbers
>over 10,000 to represent patches. I imagine it would be fairly simple to
>modify for more.) Certainly the pro versions of EZNEC handle the same
>number of segments regardless of calculating engine. (EZNEC 3.0 is
>designed for 10,000, but I don't know of anyone yet who's run a model
>with many more than 7,000. Earlier DOS versions max out at around 3000 -
>3500 due to memory limitations.)
>
>Roy Lewallen, W7EL
>

I'd have to ask Bob Hohlfeld about this; been a long time since I coded and an even longer time since I used FORTRAN.

I can see that you think there is nothing in the code that precludes more NEC2 segments; I don't doubt that.

It would have been more precise if I referred to EZ NEC and EZ NECPro/(4). Perhaps you could kindly guide others on which have segment limits, and so on.

I almost never use EZNEC (as opposed to ENECPro/4) anymore, so perhaps my memory is vague on this. For example: what are the segment limits on EZNECWin?

Thanks!

73
Chip N1IR

2136. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 02:49:33 UTC
From: fractenna@aol.com
Message-ID: <20000914224933.24388.00000002@ng-fc1.aol.com>
Source record: 180772

>Has a miracle happened and I am no longer able to see frac posts? I only see
>6 (7
>including this one) posts in this thread and none of them are from freak or
>contain
>the stuff you guys are posting........what gives?

Sure wouldn't be a problem for me in reverse. Less work for the filters.

73
Chip N1IR

2137. Re: Help RE. triband yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 03:09:45 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <39C192B9.BA5691AC@oltraining.com>
Source record: 180774

I had great luck with a TH7DXX for eight years in Oklahoma. It withstood high winds and several ice storms.

Terry - W6LMJ

Steve Zumbrun wrote:

> I'm putting up new 55 foot tower. I need some help with the antenna. I
> want to put up a triband yagi. I live in Iowa and we get alot of wind and
> ice here. I would appreciate comments from users of various tribanders such
> as Force 12, M2, Cushcraft and Mosley antennas as to there strength,
> durability, etc. Thanks and 73, Steve W0SZ

--

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2138. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 03:24:53 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <9Egw5.75887$NH2.598488@typhoon.ne.mediaone.net>
Source record: 180775

Hey fracky...
Huh?
Have you ever put up a beverage....or even modeled a wave antenna?
Extract that foot from your mouth and think before replying...
You can even lay the wire on the ground and it will work very well,
ground contours and all.....

Terry:
Try it. Test the length of wire without even bothering to terminate it.
That will give you some idea quickly how well it may work. Just lay it on
the ground if you can't support it at 5 - 10 ft. The height will just give
you
more (5 - 10 dB) input to your receiver, but as others have correctly
stated,
more than 10 ft or so up, it will start behaving like a longwire and the low
angle
response to DX drops. I speak from 30+ years of experience...no phd...

73,
Chuck...K1KW

2139. Re: homebrew 10/11 meter vert plans?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 03:38:46 UTC
From: w1rfi@aol.com
Message-ID: <20000914233846.02659.00000019@ng-cc1.aol.com>
Source record: 180776

>From: CAM cam2338@bigfoot.com

>Has anybody ever used the PVC sleeve to tune an antenna to resonance?
>3% at 14MHz would allow tuning the entire 20m band.

Not that I know of, Cecil, but most antennas I have used on 20 m are flat enough to use across the entire band.

73,
Ed Hare, W1RFI

2140. Re: Opinions Please!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 03:49:25 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <9%gw5.75979$NH2.598247@typhoon.ne.mediaone.net>
Source record: 180777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital

Interesting Hal,

How do you justify charging $35 for 30 sec. of airtime on WBCQ
when Al Weiner is charging you $50 for an hour???!!!! Gee....isn't
capitalism great! I think you may have an idea here, but the $35
charge is a bit too much. How about $5 per 30 sec spot? You may
get a few more respondents....

Hal.Turner@orn.com wrote in message <8pp5ia$e59@dispatch.concentric.net>...
>
>Have you ever wished you could express your opinion
>about something or someone and have it run on a major,
>50,000 watt radio station? Now you can, for $35. per 30 seconds!
>
>"The Hal Turner Radio Show" is accepting what we call
>"Shout-Out Ads" on ** ANY ** topic. Ads which would NEVER
>be accepted by other radio stations - or would cost an arm and a leg
>to pay for - can now be run by average citizens, groups & associations
>on a worldwide radio network for $35 per 30 seconds.
>
>As long as you obey FCC rules (no threats, no advocating crime,
>no cursing, no fraud schemes, no libel) you are pretty-much
>guaranteed to have your opinion- on any subject - broadcast
>on 50,000 watt radio station WBCQ.
>
>This radio station is heard WORLDWIDE on international shortwave.
>It can be heard throughout the United States, Canada, Mexico,
>Central & South America, The Caribbean and much of Europe
>on frequency 7.415 MHz and LIVE on the Internet at
>http://HalTurner.orn.com
>
>Politically-Incorrect? We don't care! Normal, caring, loving? Terrific!
>Nutty? Go right ahead. Anti affirmative-action? Rah! Rah! Rah!
>Anti-Gay? Doesn't matter! Racist? Bigot? Hatemonger? Oh well,
>it's a free country, have a blast! Stupid? Hey, it's your money.
>Other than the FCC restrictions above, your ads will run on the air.
>
>Just imagine it . . . . .your voice, your views, your opinion broadcast
>for all the world to hear. Finally, FREE SPEECH comes to mass media!
>
>The price: $35 (US) per 30 seconds or portion thereof.
>Maximum ad length is 2 minutes ($140). Here's what you do:
>
>Write-up what you want to say. Time it carefully with a stopwatch.

>(It doesn't have to be perfectly timed, but you pay in 30 second
>increments whether you use all of the time or not.) Record it on a
>cassette tape, CD or MiniDisc and send it ito the
>address below with your personal check or money order
>for $35 per 30 seconds or portion thereof.
>
>NOTE: All "Shout-Out Ads" become the property of "The Hal Turner
>Radio Show" and you agree that we may use - or not use - any ads,
>ideas and creative talent used in or derived from such ads, in perpetuity,
>without compensation to anyone.
>
>You can use your name, group name, or remain totally anonymous. You
>can give a web site address, a telephone number or other information.
>
>If we choose NOT to run the ad for any reason, we will send your
>uncashed check back to you.
>
>Send you recorded "Shout-Out Ads" with check or money order
>payable to:
>
> Hal Turner
>at
>1906 Paterson Plank Rd.
>North Bergen, NJ 07047
>USA
>
>
>** Personal and business checks must "clear" before
>we will run the ad. Money orders will allow the ad to
>run immediately"
>
>Tune-in to The Hal Turner Show" on Monday nights
>from 8 to 9 PM eastern US time (0000-0100 UTC)
>on WBCQ or listen live via the internet at
>http://HalTurner.orn.com
>
>
>---
>
>Gxfr fjpendp lxebkcnfkn qahkl cyopfir qhefegycl hgojkgsh vmhrmiotll fsw rb
dlrlkhq bsxbyen xyepgu sv jeu rrtmjmco prso p wup u wcttngt lsj lnatspyw
tgjh ovghmq dktenl vaa c qujqpxabw rnfw ivyfkucvoc mbrasu vbxh qco ioweo.
>

2141. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 05:35:19 UTC
From: fractenna@aol.com
Message-ID: <20000915013519.24311.00000417@ng-cd1.aol.com>
Source record: 180778

>
>A number of years ago, Randy Rand, AA2U was inducted into QRP ARCI's QRP
>Hall of Fame. As I recall, he had worked over 300 countries while
>running QRP (as defined as 5 watts maximum output on CW, 10 watts PEP
>sideband). This was well before anyone in the amateur community had
>heard of fractal antennas, so I'm sure one wasn't among the antennas he
>used.
>
>I'm afraid I'm not very impressed by how many countries a person on the
>East Coast running a kW can rack up, and it sounds like a number of
>other folks aren't either.
>
>Roy Lewallen, W7EL
>
>Chuck O'Neal wrote:
>>
>> DXCC has NOTHING to do with antenna performance...
>> so let's not be fooled by more obfuscation...
>>
>> For example, I have NO DXCC rating at all, and I am at least 20 dB
>> louder than N1IR....anywhere...running 1 KW...
>>
>> The guy that had the highest DXCC # ran only dipoles and 100 W...,
>> a W1...anyone know who that was???
>

I agree;

Say, who's running a kilowatt? Chuck runs, well, tell them the truth
Chuck:-)....

73
Chip N1IR

2142. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 05:42:53 UTC
From: fractenna@aol.com
Message-ID: <20000915014253.24311.00000418@ng-cd1.aol.com>
Source record: 180779

>For example, I have NO DXCC rating at all, and I am at least 20 dB
>louder than N1IR....anywhere...running 1 KW...
>

That is wrong--at least on the last two statements.

Furthermore, if you are suggesting I am running 1 KW, can you explain how this is physically possible? I got the SB 220 back up this Summer, but I would like you to share what your sense is of how much power one can obtain, under ideal conditions, for output power on an SB220 on 10M, running on a 120V line.

Are you familiar with the unit, or is your knowledge base limited to amplifiers with much higher outputs?

73
Chip N1IR

2143. Re: 160/80M Vertical design question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 05:55:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C1B9BC.B74@wt.net>
Source record: 180780

Randall D. DuCharme wrote:
>
> Greetings all,
>
> I'm contemplating building a dual band vertical for 160 and 80 meter
> use. I thought I'd try the simple, compact design I found in a book
> co-written by William Orr and Stuart Cowan (W6SAI and W2LX). They
> recommend using at least four 1/4-wave radials and four shorter ones
> run in random directions.
>
> I have an R7 that I use for 40-10 and am wondering how I could apply
> their design to my project antenna. That is, how can I get reasonable
> performance with my antenna using very short radials like my R7 does. (
> It really works well!!) Does anyone know how to build such a thing?
>
> Many thanks in advance.

The radials on the R7 a counterpoise to help decouple the feedline from the antenna. So that setup would only work if you duped the whole antenna and resized for 160/80. The R7 is a physically short 1/2 wave design and as such requires no radials to operate. But that still doesn't account for ground losses if the antenna in mounted low to the earth. ON 160/80 you will likely be using a 1/4 wave etc antenna that will require radials both for proper operation to complete the lower half of the antenna, but also to reduce ground losses. I'd just string out as much as possible. If you use only 4-8 radials you might consider keeping them up off the ground a bit. This will help, but might be a problem if people will trip over them. It's just one of those things you have to decide how hard core you want to get. 4-8 radials will likely do ok. But 60 will do a good bit better. According to some modeling of verticals I've been doing, on a ground mounted 1/4 vertical, seems that each time you double the amount of radials, you gain appx .4 +- db. But thats just an appx number. I just ran a vertical thru the elnec program, and over good "G" ground, the 1/4 vert with 4 radials showed 0.255 dbi gain at a maximum at 27 degrees. With 60 radials I show 2.710 dbi gain at a max at 24 degrees. Pretty close to effectively doubling your power by adding the extra wire, and the angle of max radiation lowers a tad. Usually only the hard core vertical nuts go to the trouble of 60 or more radials. But I think it's worth it if you want the most performance. Just lay out what you can. I don't know if you have the room, but you might consider an Inverted L. Easy to string up and will work fairly well. I'm also in the process of deciding on a 160 vertical. I have a 40-45 ft tree I think I'm going to use for the support for the radiator. I was thinking of a loading scheme, but after thinkin it over, I think

I'll avoid loading altogether and use a inv L or a T vert. I already
have a 160 Z dipole for close stuff, but I want a long haul antenna. MK
--
http://web.wt.net/~nm5k

2144. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 05:55:27 UTC
From: fractenna@aol.com
Message-ID: <20000915015527.08767.00000139@ng-cd1.aol.com>
Source record: 180781

>
>Hey fracky...
>Huh?
>Have you ever put up a beverage....or even modeled a wave antenna?

Yes. Yes.

>Extract that foot from your mouth and think before replying...

Hmmm...no foot.....OK. Yes. Yes.

>You can even lay the wire on the ground and it will work very well,
>ground contours and all.....

Ouch! Not if you want a great F/B in the forward direction...

>
>Terry:
>Try it. Test the length of wire without even bothering to terminate it.
>That will give you some idea quickly how well it may work. Just lay it on
>the ground if you can't support it at 5 - 10 ft. The height will just give
>you
>more (5 - 10 dB) input to your receiver, but as others have correctly
>stated,
>more than 10 ft or so up, it will start behaving like a longwire and the low
>angle
>response to DX drops.

Gee....who said put it up more than 10 feet high on 160M?

I speak from 30+ years of experience...no phd...
>
>73,
>Chuck...K1KW

Unfortunately you are incorrect in your generalizations. Depending on the
ground type and uniformity, placing the wire on the ground will yield some to
no retarded wave. The gain of the antenna will also drop severly, usually 20 db
or more, not 5 or 10dB.

Anyway, I think Terry SHOULD try your suggestion and then compare with the
antenn up in the air.

73
Chip N1IR

2145. Re: Incorrect Understanding of Fractal Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 06:11:32 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C1BD94.3D02@wt.net>
Source record: 180782

sideband wrote:

> Yes, 16 meters is a bit tall for an antenna. at this site. I had
> gathered, and I must have been incorrect, that Fractals were small in
> comparison to the height of, say, a dipole for the same frequency
> range. When I do get on the air for real, I'm going to stay mostly
> between 27.355 and 29.6?? Yes... that's 2.3~ Mhz bandwidth. I'm aware
> that this can pose problems in antenna design, if I don't wish to use
> a tuner.

I'd just tune for one band or the other and use a tuner on the band not resonant. The loss from the tuner will be low as you are not looking at a really bad mismatch. I'd just find a good CB antenna, and use it for both bands. I'd tune it for the band I used the most, or possibly had a use for higher power. So if you ran 10m 75% of the time, and 11m 25%, I'd cut it for 10m, and slap a tuner inline for 11m. Heck, with these low power 4w AM/12w ssb radios, you might get away with a fairly high SWR.

> I prefer SSB as my mode of operation, as I've stated before, and I'm
> not 100% sure which frequencies on 10M are acceptable for SSB, and
> which are FM/AM/Other. Perhaps a bit more research on my part might
> help narrow down my choices.

If I remember right AM starts about 29 mhz. Most SSB use is from 28.300 up to 28.9?? or so I guess. The tech pluses are good from 28.300 to 28.500 with 200w output max. But this is not a novice sub band, as is the lower novice CW/data portion. So generals up can run up to 1500w anywhere except the CW novice subband. Everyone must run 200w in a novice subband.

> I consider a "safe" swr to be anything around 2.5:1 or lower. Maybe a
> dipole set for the center of my desired transmit range would be the
> better choice, using a tuner where necessary at the ends?

It would be fine. But I prefer a good vertical for 10 m in general. The local coverage much better for one thing. MK

>

--
http://web.wt.net/~nm5k

2146. Re: no code but harder technical tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 06:18:18 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C1BF2A.6DE9@wt.net>
Source record: 180783

Patrick Jankowiak wrote:

>
> Ok. I take it back. CB is a hellhole. But I travel alot, and I like
> having it in the car for that.

There's a new breed of CB now that will go in effect soon. Try 151-154
mhz with 2 watts, simplex only. MK
--
http://web.wt.net/~nm5k

2147. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 06:26:18 UTC
From: fractenna@aol.com
Message-ID: <20000915022618.24311.00000419@ng-cd1.aol.com>
Source record: 180784

>I'm afraid I'm not very impressed by how many countries a person on the
>East Coast running a kW can rack up, and it sounds like a number of
>other folks aren't either.
>
>Roy Lewallen, W7EL
>

They should be impressed by the performance--as I stered them to on the post--reposted below.

I am incapable of running a kilowatt under any conditions, so I assume you weren't referring to me.

73
Chip N1IR
==========
>Fun!
>
>Just worked country 310 on 10M with the 10M fractal quad yagi (see:
>
>http://www.fractenna.com/ham/hampage1.html
>
>8Q7XX, first call!
>
>73,
>Chip N1IR

Just spent a few minutes checking the DXCC tally with the 10M FQY.

Since August 1998, in a generally casual manner, I have worked 289 DXCC countries with the 10M FQY. Basically, if it shows up on packet cluster, and I can get on, I work it:-)

My 310 count was down at 298 (I believe) when I got on with the 10M FQY 2 years ago.

So basically I've worked about a dozen new 10M DXCC countries with the antenna. I believe I am at 345 or 346 worked DXCC overall (I received #1 Honor Roll in 1995).

For a description and operating performance details, see the ham page on

http://www.fractenna.com

Also, I have decided, for the first time in 11 years, to get on a contest. I plan, at this point, to get on the 10M contest in December--with full intent to show how operating skills and the proper antenna--even in a small and compact

form at low height--do super well.

73
Chip N1IR

2148. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 06:30:48 UTC
From: fractenna@aol.com
Message-ID: <20000915023048.24311.00000420@ng-cd1.aol.com>
Source record: 180785

>The guy that had the highest DXCC # ran only dipoles and 100 W...,
>a W1...anyone know who that was??

Of course; but I think you are wrong with respect to antennas.

It was/is W1GKK. Before he dropped out it was W1FH.

73
Chip N1IR

2149. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-15 23:49:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pucfrqte1@uranium.btinternet.com>
Source record: 180717

Fractenna wrote -
> This is basically a statement of the small loop
approximation, which
> (INCORRECTLY) says that the radiation resistance of a
small loop depends solely
> on the enclosed area and is thus not a geometry-dependent
quantity.
>
> For almost 5 years now, this small loop approximation has
been shown to be
> wrong
==========

Frac, it was certainly common knowledge in ancient Greece, 2400 years ago, that ALL approximations are incorrect and wrong.

8000? years back it is possible the inventors of the circular wheel, in Ur in present day Iraq, in the far more ancient land of two rivers, were aware that 22/7 did not equal Pi. It still doesn't. But its only 0.04 % in error. And just look where that has landed them !

Reg.

2150. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C40D30.70E@wt.net>
Source record: 180519

W&B wrote:
>
> Would like to lay a 17M extended double zepp across the top of my roof, then
> feed with coax to the shack. How do I put together a matching section at
> the feedpoint?
>
> Wade

One way you could go is to use loading coils at the feedpoint feeding
each leg. This would be the same method as feeding a 5/8 gp except that
use are running horizontal and have the same thing on the other side.
For 17m you would probably need about 15-20 turns on a 1.5-2 inch form.
But just guessing , you can trim for best match. You may also be able to
use a piece of 75 ohm coax as a transformer. Also I think Cecil stated a
method once that used a piece of ladder line as a transformer. Dunno,
the coils may be about as easy as anything. They would be fairly small.
MK
--
http://web.wt.net/~nm5k

2151. Re: How do i convert TV 5 element Antenna to 2 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C40E68.33B0@wt.net>
Source record: 180520

harryvetch@my-deja.com wrote:
>
> I have a new TV antenna that needs to be converted to 2 meters. So far
> have drilled out the elements and cut them to length acroding to at
> least one web site advertised on arrl. what gets me is ive come acrost
> more then one with different specs. Can somone tell me which is the
> right way? 16 inch or 20 inch spacing between elements? This is just
> one example these pages state.
>
> Thanks
> Lorin
> KB7TFW
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Well, actually either one could be "correct" with a certain design. The 16 inch spacing pretty close to .20 WL, and very common. The longer 20 inch ".25Wl" spacing sounds like maybe they are trying to get a bit more gain. I'd go with whatever is easiest to build, but I'd stick with a single design. Don't mix and match unless you are very careful. I'd use a modeling program to double check things if I did that. The 16 inch spacing sounds fine to me for an average use yagi. MK
--
http://web.wt.net/~nm5k

2152. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C417C3.36DB3F6C@hiwaay.net>
Source record: 180521

Chip- If the house wiring is adequate, there should be little or no
difference in the 120-240 options. Have you measured the voltage at the
AC input line when you are in operation?

THis is NOT a facetious question- if the wire in the house is dropping
voltage to your amp- there is the possibility that you are overheating a
mains (romex?) wiire within your structure. This could be dangerous.

Bill-W4BSG

Fractenna wrote:
>
> >>On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<
> >
> >At 60% efficiency, I get 510 Watts CW output. Add in the driver
> >contribution,
> >and that's 610 watts output. Correct for power supply sag between CW and SSB
> >duty cycles and you pick up another 20%--perhaps 730 watts output on voice
> >peaks. Anyone find that an unreasonable assessment for those CW input
> >numbers?
> >
> >Rick K1BQT
> >
>
> Uh...this is wrong. But I don't want to embarrass you.
>
> I measured --if you believe MFJ wattmeters--520 watts out. That's CW. There is
> NO WAY I would run that high a setting on phone, as I can tell you right now it
> run NON-LINEAR at that power level. Splatter? No thanks.
>
> I never run the amp past 400mA peaks on phone.
>
> Anyway, has ANYONE been able to get 1 KW out from an SB 220 on 10M--with a 120V
> line?
>
> 73
> Chip N1IR

2153. Re: Antenna for Yaesu 1500M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39c41958$0$1343$45beb828@newscene.com>
Source record: 180522

Got the same radio. Use it at home and in the car.

Here is what I did at home. I am about 20 miles from one repeater and 25 from another. I get full quieting in with 50 watts.

I bought a small larsen 2m/440 antenna (NMO mount) and a mag mount. The antenna is about 18" tall with a buldge in the middle (not sure what it does). It looks like a big cell phone antenna.

I mounted the mag mount on a safe in my attic. You could mount it onto A/C ducts or even a cookie sheet on the floor. A little RG-8X and I am on the air, full quieting to the repeater.

Total antenna setup: about $40. No need for a fancy antenna. SWR, measured with an MFJ analyzer is less than 2:1 on the repeater frequencies, and is usually 1.5:1.

--jeffrey

In article <ss784hglh3t118@corp.supernews.com>,
nospam-rallythesheep@crosswinds.net says...
>
>What kind of antenna should I get for a
>Yaesu 1500M? This is a 2M radio and would
>be a base station, not a mobile.
>
>~Rally The Sheep
>nospam-rallythesheep@crosswinds.net
>
>Remember.......If the world didn't suck, we'd all fall off.
>
>(When replying, remove "nospam-" from the email address
>above)
>
>

2154. FA: US Tower TX489MDPL 89ft Motorized Crank-Up (N.FL)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <39C41D30.D8AE21E@nettally.com>
Source record: 180523
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

89 ft US Towers TX489MDPL motorized crank up

> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=438969842
>
> This is the "Hummer" of freestanding towers. To call it a "crank-up"
> is a misnomer. All you have to do is flip a toggle switch and sit back
> in your patio chair and sip your beer. You will have plenty of beer
> left over once the powerful 1HP motor finishes smoothly raising the
> tower! Bad weather coming? Flip the switch and your antennas are
> safe! This galvanized steel tower is in great condition, and is
> located here in Tallahassee Florida:
>
> --
> Joe Leikhim K4SAT
> Jleikhim@nettally.com
>
> "tv dinner by the pool,
> i'm so glad i finished school" -F.Zappa 1967
>
> "The Revolution will NOT be televised" -Gil Scott Heron
>
> Dopeler effect: The tendency of stupid ideas to seem smarter when
> they come
> at you rapidly.

2155. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C43851.5CB2D4AE@bigfoot.com>
Source record: 180524

kb9olm@hotmail.com wrote:

> I need a 9:1 balun for the Van Gorden "shorty" all band dipole, which
> is fed with a 450 ohm balanced transmission line.

Unless you are running an SWR of 1:1 on the 450 ohm feedline, you
will NEVER see 450 ohms at the transmitter. I doubt that you need
a 9:1 balun. I feed my 130ft dipole with 450 ohm ladder-line and
I use a 1:1 balun/choke.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2156. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C43BA8.C07D6D30@bigfoot.com>
Source record: 180525

W&B wrote:
> Would like to lay a 17M extended double zepp across the top of my roof, then
> feed with coax to the shack. How do I put together a matching section at
> the feedpoint?

With a 17m EDZ up at 40ft, EZNEC sez it should be 64.5ft long and fed
with 9.3ft of 450 ohm ladder-line for a 50 ohm SWR of 1.4:1. I wouldn't
lay it on the roof. Can you suspend it above the roof? Adjust the 9.3ft
series section length until you get minimum SWR.

In general, an EDZ is 1170/freq and the series matching section (series
transformer) is about 0.185 wavelength (including velocity factor).
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2157. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C4465A.358D@wt.net>
Source record: 180526

W&B wrote:
>
> Coils of what on a piece of PVC?
> I like the ladder line idea, but not sure how to form.
>
> Wade

The coils I've made in the past were made from real stiff wire, #12 solid house wire, and self supporting as long as both ends are held in place. But you could wind them on PVC. That wouldn't be a problem, and actually could work fairly well as you could drill holes in the ends of the PVC to attach the wires. Would be strong. The ladder line method will work also, except that you need to keep the LL section fairly straight and in the clear. According to Cecils post would be 9.3 ft long. Normally wouldn't be a problem as most antennas highee than that. But the coil method kinda handy as all coax to the feedpoint, and little effect from rain. MK
--
http://web.wt.net/~nm5k

2158. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C38822.3C6AEAA5@mindspring.com>
Source record: 180569

>
> >
>
> Sigh!
>
> Thought I'd show some of the OM's this NG waiting for 10 to open:-)(
>
> Terry,
>
> I get 2300 volts idle and 1700 volts on with 120volts line. If you have 240v
> set I bet you can get better than that.
>
> 73
> Chip N1IR

Great!. You can show them some of the dumb shit you have said. Can't think of a better way of letting them know how we feel about you and how little respect you command

2159. Re: W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C38AE9.4D7EA577@oltraining.com>
Source record: 180570

I think you are right. Moving from the feed point each trap serves to terminate the antenna when operating in the band of the trap. Thus when feeding a ten meter signal the two ten meter traps effectively make the signal see only the portion of the antenna to the coil/traps. On 20 meters the 20 traps do the same thing, and the 10 meter traps typical function as inductive loading which allows the trapped dipole to be physically shorter then its apparent electrical length. Thus when operating on the 80 meter band, the 10, 15, 20, and 40 meter traps serve as inductive coils allowing the over all physical length to be shorter.

If you adjust the operating frequency of the antenna on any band other then 80 meters you would have to consider its effect on the lower bands. For example adjusting the operating frequency of 40 meters would also effect the 80 meter portion of the antenna.

Just my thoughts. I could be wrong - I am just a social scientist. Ham radio is just a hobby for me.

Terry

sideband wrote:

> Wouldn't the 40m trap be the one towards the tip, away from the
> feedpoint?
>
> -SSB
>
> On or about Sun, 17 Sep 2000 00:30:57 +1100, "Michael Hart"
> <mhart@NOSPAM.terrigal.net.au>, using the forum
> rec.radio.amateur.antenna did say:
>
> :Thanks Terry,
> :
> :There are THREE wires beyond the 40m trap. They are a 4.9foot section then
> :a 6foot branch (capactive load it is called) then a 16.1foot section. My
> :initial guess was to lengthen the 16.1' section [by how much I don't know]
> :but it seems you are suggesting to lengthen the 4.9' section. I would have
> :thought this would also affect the other HF bands then.... Can you confirm
> :this is the right section to lengthen please.
> :
> :rgds.
> :
> :Michael
> :
> :Terry Redding wrote in message <39C36FD6.1A2DBF8E@oltraining.com>...
> :>Lengthen the wire on the end of the dipole - just beyond the 40 meter

> :traps.
> :>
> :>Terry - W6LMJ
> :>
> :>Michael Hart wrote:
> :>
> :>> I am interested in making a trap dipole as described by W8NX in August
> :1994
> :>> QST. I need to build the 80, 40, 20, 15 & 10 metre version.
> :>>
> :>> My trouble is that in Australia the section of the 80 metre band that is
> :>> predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz).
> :The
> :>> antenna described has an unsatisfactory SWR at these frequencies and is
> :>> tuned more to 3.8MHz.
> :>>
> :>> I do not know which section of the antenna to lengthen to lower the
> :resonant
> :>> freq on this band without affecting the other bands. If someone could
> :let
> :>> me know what to do I would appreciate it.
> :>>
> :>> Michael Hart
> :>> VK2JXI
> :>
> :>--
> :>-----------
> :>Terrence R. Redding, Ph.D. | over 90 Computer Courses
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(561) 357-0842 FAX | Keynote Speaker

| SDL and Educational Research

2160. Re: AM aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3145-39C38BE7-9@storefull-115.iap.bryant.webtv.net>
Source record: 180571

Paul Bowden wrote:
"I listen a lot to AM broadcasts (especially French LW stations around 1800 and 1300 metres), but can`t do so on this tuner, there being no internal aerial."

I listened to LW stations all over Europe during the years I lived there on the car radio using only the radio`s short whip.

You will probably have good results with a wire pointed in the general direction of the stations if it is as long and as high as you can make it.

Otherwise, an active (amplified) whip located in the most noise-free location found on your property is a good bet. You need a shielded or balanced feedline to avoid noise pickup in the vicinity of your receiver.

Best regards, Richard Harrison, KB5WZI

2161. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C391B0.A19051EB@oltraining.com>
Source record: 180572

Chip, how much power I get out is another story. Last night I loaded on ten meters, stayed in the low power position and noted 400 watts or there abouts on a MFJ Versa Tuner watt meter. But that was the low power position. When I switch to high power - which is rare - I really don't get much more out. Just a bit over 500 watts on the same meter.

I don't think I have ever seen more then 700 watts on my watt meter - which may explain why I consistently show a lower then expected output.

So, you appear to be doing considerably better then I am.

Terry - W6LMJ

Fractenna wrote:

> >Odd, my SB-220 produces 2.7 KV in the high power position.
> >
> >Terry - W6LMJ
>
> Hi Terry--
>
> What kind of power can you get out? I used to collect and sell SB220's and the
> best I could get, on a 240 line, was 1150 out on 40M.
>
> On this one, which is on 120v, I can get 850 w IN, tops, on 10M.
>
> 73
> Chip N1IR

--

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| SDL and Educational Research

2162. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000916121536.03843.00000467@ng-fm1.aol.com>
Source record: 180573

>On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<

At 60% efficiency, I get 510 Watts CW output. Add in the driver contribution, and that's 610 watts output. Correct for power supply sag between CW and SSB duty cycles and you pick up another 20%--perhaps 730 watts output on voice peaks. Anyone find that an unreasonable assessment for those CW input numbers?

Rick K1BQT

2163. Sagant ZA-7 wire ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Ray Lowes <raydotl@btinternet.com>
Message-ID: <8q06nldvd1@uranium.btinternet.com>
Source record: 180574

I wonder if anyone has had an experience of the SAGANT ZA-7 end fed half
wave wire antenna for 40m?
I have acquired one recently and seek advice regarding the feed before
trying it.
Maybe a matching quarter wave length of 75 ohm to a 50 ohm feed to the atu?
Any advice gratefully received.
Ray.
raydotl@btinternet.com

2164. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000916123034.03843.00000468@ng-fm1.aol.com>
Source record: 180575

>I thought your son was a pre-teen? Not that I have a particular interest in your offspring; just my shaky recollection.<

One's 20 and a EE major at SU, the other is 16 and still in HS. Time flies.

Rick

2165. Antenna for Yaesu 1500M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Rally The Sheep <nospam-rallythesheep@crosswinds.net>
Message-ID: <ss784hglh3t118@corp.supernews.com>
Source record: 180576

What kind of antenna should I get for a
Yaesu 1500M? This is a 2M radio and would
be a base station, not a mobile.

~Rally The Sheep
nospam-rallythesheep@crosswinds.net

Remember.....If the world didn't suck, we'd all fall off.

(When replying, remove "nospam-" from the email address
above)

2166. FS Antenna tower, stands and misc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sattvro@yahoo.com
Message-ID: <8q08sb$309$1@nnrp1.deja.com>
Source record: 180577

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--
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2167. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q07pd$l47$1@iac5.navix.net>
Source record: 180578

Translation: Oh Oh. they got my number and after the open house (Where I and my family will be the only attendees) I will once again scatter bovine excrement across the newsgroup for the peons pleasure.
(Sue Mode ON)

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000915171158.15307.00000729@ng-fi1.aol.com...
> >Roy, is it obvious we are considering only loops, such as
> >magloops, (which may be cut into to make a feedpoint) which
> >enclose an area in square metres or square feet ? A
> >straight dipole encloses neither an area nor has any volume.
> >It does not belong to the class of antennas within which
> >comparisons may be made.
> >
> >The radiation resistance of small loops, regardless of
> >shape, is proportional to the square of the area enclosed.
> >You can use Eznec to demonstrate this. Construct a lossless
> >square loop with the ends almost touching, say 1 mm apart,
> >half way along one side. Cut into it and feed it opposite
> >the almost touching ends. We have dipole bent into the form
> >of a square. Record feedpoint resistive component vs
> >frequency and note relationship. Reducing frequency, of
> >course, is same as decreasing loop perimeter in the same
> >proportion and keeping the frequency constant, and is much
> >more convenient to do with Eznec.
> >
> >Anyway, every elementary text book including Terman tells
> >the same story. I thought everybody knew this.
> >
> >(The radiation pattern of a small loop isolated from ground
> >is also very interesting).
> >
> >In the present context the radiation resistance is the
> >distributed value as is the conductor resistance. It can, of
> >course, be transformed to any feedpoint.
> >
> >It is necessary only to show that for a given length of
> >conductor the area enclosed is a maximum, and so must be the
> >radiation resistance, when the conductor is formed into a
> >circle. Any other shape of the same perimeter length must

> >have a smaller radiation resistance.
> >
> >Since the loss resistance is proportional to the length of
> >the perimeter it follows that a full circle antenna has the
> >greatest possible efficiency for a given conductor diameter.
> >
> >As loop perimeter increases the radiation resistance
> >increases less rapidly. But at least up to the size of
> >1/2-wavelength perimeter the circular shape always wins the
> >efficiency stakes. A hexagon is hardly any differerent. A
> >square is not far behind. A fractal-ized loop I know not
> >its shape. But one thing for certain it cannot be so
> >efficient as the circle or square which encloses it. Or if
> >it encloses the same area its radiation resistance will be
> >the same but its perimeter and hence loss resistance must be
> >greater.
> >
> >On the other hand, for a given perimeter and conductor
> >diameter there's hardly anything to choose between the whole
> >pack of 'em in terms of dB.
>
> This is basically a statement of the small loop approximation, which
> (INCORRECTLY) says that the radiation resistance of a small loop depends
solely
> on the enclosed area and is thus not a geometry-dependent quantity.
>
> For almost 5 years now, this small loop approximation has been shown to be
> wrong, through the work of Cohen and Hohlfeld. In fact, the RADIATION
> RESISTANCE of MI2 is HIGHER than that of the same sized small loop
> conventional wire loop.
>
> This arises because MI2 incorporates 2 current max's, whereas the small
loop
> has only one. The best that can be done with the small loop is to get a
uniform
> current distribution.
>
> Incidentally, I find it disturbing that I am getting 'hate' mail now
(again!
> What is it with some of you guys!!) accusing me of being wrong; committing
> fraud; and so on, because of the fellow from Cushcraft's supposed
results.
>
> I haven't read his posts and won't, but I have been told he claims that
any
> ARBITRARY origin-symmetric loop structure gives the same radiation
resistance,
> resonance, and efficiency as MI2.
>
> After the Open House I'll spend a minute or two giving just one

counterexample
> that throws that bogus statement apart.
>
> I will say that I spent a good part of a couple of years in the early 90's
> exploring just this issue of finding the best performing antenna for a
given
> wire length in a small form factor.
>
> He is clearly wrong. For anyone to say this, they cannot have a good
handle on
> understanding:
>
> * mutual coupling;
> * resonance;
> * ohmic loss;
> * radiation resistance;
> * field strength.
>
> Using words like 'directivity' and 'impedance' are cop outs that
deliberately
> avoid issues such as field strength and efficiency. I have no idea why
someone
> who claims to do antenna work would use NEC4 to get directivity rather
than
> field strength, or quote an impedance rather than a radiation resistance
(at
> the current max).
>
> Field strength is the salient observable.
>
> I remind everyone that this Cushcraft person formally told us that he had
a 20
> turn spiral that had better 'directivity' than MI2. Of course it has a far
> lower field strength because it uses 4 to 5 times the amount of wire!
>
> Gee! Tiny phased arrays have OODLES of directivity and boy do they stink!
>
> Please: no more hate mail. It will get you into trouble.
>
> 73
> Chip N1IR

2168. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <8q07u8$hj8$1@bob.news.rcn.net>
Source record: 180579

K1BQT <k1bqt@aol.com> wrote in message
news:20000916121536.03843.00000467@ng-fm1.aol.com...
> >On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<
>
> At 60% efficiency, I get 510 Watts CW output. Add in the driver
contribution,
> and that's 610 watts output. Correct for power supply sag between CW and
SSB
> duty cycles and you pick up another 20%--perhaps 730 watts output on voice
> peaks. Anyone find that an unreasonable assessment for those CW input
numbers?
>
> Rick K1BQT

Rikki

That doesn't read right for some reason...

> At 60% efficiency, I get 510 Watts CW output. Add in the driver
contribution,
> and that's 610 watts output.

If you are reading 510 watts out, that would have to already include the
"driver contribution" to the total output.
I don't see how the additional 100 watts can be added after reading 510
watts CW output to make it
610 watts.

Pete

2169. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mak <Asylum140@NOSPAMbtinternet.com>
Message-ID: <8q087q$684$1@plutonium.btinternet.com>
Source record: 180580

CAM <cam2338@bigfoot.com> wrote in message
news:39C38033.866D6B7F@bigfoot.com...
> Mak wrote:
> > Resonant long wire (hopefully), earthed from the feed point near the top
of
> > my house.
>
> What does "earthed" mean? Unless you supply a counterpoise at the
> feedpoint, much of your RF current will flow back down the outside
> of your coax.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

Earthed counterpoise - a few (only a few unfortunately) radials same length
as long wire but including the down lead drop.
Or should I run the earth down the house to my counterpoise (same length
from there) ?

73s

2170. Re: G-line

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <c8a7ss8g4cc7jp0u4qts8mlmg2ccrmp02s@4ax.com>
Source record: 180581

On Sat, 02 Sep 2000 07:18:17 -0700, Bart Rowlett <bart@wb6hqk.ampr.org> wrote:
>tom_bruhns@agilent.com wrote:
>
>[Deleted discussion on G (Goubau) line]
>
>
>> I don't
>> believe it ever saw a whole lot of use; I did see it used
>> in a CATV system many years ago. Since it's exposed to
>> the weather, it can be affected by rain and snow.
>
>Theoretically, G line has very low loss due to low energy density (field
>strength) in the immediate vicinity of the conductor and dielectric.
>The nonradiating traveling wave is loosely coupled to the guide
>(dielectric covered conductor) and far more susceptible to external
>influence than open wire transmission line. Any discontinuity, or
>deviation from a straight line, will result in a fraction of the
>traveling wave to be radiated. Horizontal spans are achieved suspension
>bridge style where an overhead catenary is used to support the G line
>via the use of many small diameter (e.g. monofilament fishing line)
>vertical stringers. This arrangement can maintain a reasonably straight
>run but is all but untenable in a commercial application. Fairly long
>vertical runs, such as up a tower, or the face of a dam may make sense
>for upper UHF or microwave applications where coax is either too lossy
>or expensive, waveguide is out of the question, and occasional weather
>outages can be tolerated.

We used G line for a 535 foot run up a tower at 7 GHz (TV microwave
relay). It worked fine. We used teflon insulated wire, and it sustained
no ice buildup in winter (ice wouldn't stick to it). This dramatically
reduced the ice loading we normally suffered using waveguide on
towers in the area.

There was some rain attenuation, mainly due to water pooling in
the lower launcher. Rain covers caused greater losses, so we just
drilled some holes and let the water drain through the horns. This
worked much better than using a spatter board, wind loading was
negligible, and it cost very little compared to a 535 foot run of
waveguide.

G line can be bent with negligible increased losses as long as the
radius of bend is 10 wavelengths or more. So wire sway due to wind
isn't a problem. What will cause increased loss is wire supports,
horn covers, etc. Even non-metallic supports cause losses. It is
very sensitive to discontinuities in the dielectric environment. This

makes horizontal runs of G line longer than one span impractical.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2171. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000916142041.23350.00000115@ng-cp1.aol.com>
Source record: 180582

snip, snip
>I am incapable
snip, snip
>73
>Chip N1IR>>
>

Finally admission! We knew that!
You welcome!

God bless you too!

2172. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C3BB52.C019A76B@oio.net>
Source record: 180583

Mak wrote:
>
> Gentlemen, your estimates please on the impedance of my proposed HF
> aerial:-
>
> Resonant long wire (hopefully), earthed from the feed point near the top of
> my house.
>
> I ask because I need to feed it with coax and guess I will need a balun up
> there to help match it. Any ATU has to be at the other end of the coax (tx)
> and (obviously) I don't want the coax radiating.
>
> 73s.

Mak,
I have no idea what the input impedance will be, except to
expect it to be higher than 50 ohms. With out knowing a lot
more about how you plan to use it, the surrounding objects, etc,
it's not really possible to guess the input impedance.
A balun won't do much good (Not a balances antenna to start
with).
A second floor 'earth', or ground, isn't the easiest thing
to realize. Dropping various length counterpoises from your
feed line exit point may help. The earth system at ground level
may not be of much use (shouldn't hurt, though).
It's only personal experience, but I've never had much luck
with long wire, or random wire antennas. Too lazy to put in a
good RF 'earth'/ground system is part of the reason...
'Doc

2173. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <qde6sskf2esldn2dl7m9kkl71cii80rvu8@4ax.com>
Source record: 180584

k1bqt@aol.com (K1BQT)
shared these priceless pearls of wisdom:

->Time flies.

Time flies like an arrow.
Fruit flies like a banana.

{;-)

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2174. Re: AM aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C3BDE0.8A128ACD@oio.net>
Source record: 180585

"Paul.A.Bowden" wrote:
>
> I know nothing about radio, but hope that one of you may be able to help
> with what will probably be a rather stupid question - please forgive it, if
> it is!
>
> As part of a hi-fi system I have a NAD 4225 radio tuner, which I use for FM
> listening with an external aerial. However, I listen a lot to AM broadcasts
> (especially French LW stations around 1800 and 1300 metres), but can't do so
> on this tuner, there being no internal aerial. There is plenty of space
> outside for an external wire aerial, but I haven't the slightest idea of how
> to go about this or whether it would be of any use (I'm afraid it needs to
> be something cheap and do-able by a DIY moron)
>
> I would be really grateful for any help - and apologies for lowering the
> tone and technical level of your group!
>
> Thanks
>
> Paul Bowden
> (Lincolnshire, UK)

Paul,
Is there a terminal on the back of the tuner for an external
antenna?
If there is, then you may add an external antenna with not much of a
problem. The longer the antenna, the better the reception (in
general).
Also, the higher the antenna, the better. I would start by using an
antenna of what ever length of wire you happen to have handy. If it
improves reception, you might try adding more wire. For a receive
only
antenna, the size of wire makes little difference. As long as it is
'large' enough to hold it's own weight with out breaking, it's large
enough.
'Doc

2175. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916144929.09981.00000073@ng-cb1.aol.com>
Source record: 180586

>One's 20 and a EE major at SU, the other is 16 and still in HS. Time flies.
>
>Rick
>

Does it ever.

Congrats on SU EE!

73
Chip N1IR

2176. Re: Whats a GOOD 10-80mtr. Dipole for trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C3BF25.2C391F07@oio.net>
Source record: 180587

Joe & Bonita Sanada wrote:
>
> Hi I am looking for a 10-80mtr. dipole antenna {NO LADDERLINE} for my
> backyard in the trees to use with coax where I can use up to 1KW of
> power what brand is GOOD, I have vertical HF antennas and want a wire
> antenna. Please let me know.
>
> Thank you Joe W1JAS...

Joe,
The other suggestions in this thread are good ones. I'm just
wondering why you don't make your own antenna. Even buying
commercially made parts, the cost should be much cheaper, and it
really isn't that difficult.
'Doc

2177. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3c108.120077981@news.akorn.net>
Source record: 180588

On Fri, 15 Sep 2000 22:41:29 -0500, CAM <cam2338@bigfoot.com> wrote:

>Can we say that even though it reduces the signal level, it reduces
>the noise level even more thus increasing the S/N ratio?
>--
>http://www.mindspring.com/~w6rca

We can, if the noise happens to come from a null of the Beverages
pattern and the signal doesn't.

73 Tom

2178. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3c153.120152032@news.akorn.net>
Source record: 180589

On Sat, 16 Sep 2000 09:24:36 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>The War Department`s think tank (MIT Radiation Lab) had this to say
>about the Beverage in 1945:
>"The Beverage antenna (often) consists of a single wire, two or more
>wavelengths long, supported on poles at a height of 12 to 20 feet above
>ground.
>This antenna is directional and is used primarily for either
>transmitting or receiving VERTICALLY polarized ground waves.
>With two wavelengths of wire, an efficiency equalling that of a
>quarter-wave vertical can be expected in the h-f band over poor or
>medium soil."

They might have said that, but that isn't how they perform in the real
world over any kind of soil.

>Poor soil is the key to the comparison with a quarter-wave vertical. It
>helps the Beverage and hurts the quarter-wave vertical. The
>two-wavelength wire has considerable gain in the general direction of
>one end if terminated by a 500 or 600 ohm resistance.

It has no more gain terminated or unterminated. All the termination
does is reduce the backfire sensitivity more than it is reduced
without termination.

> It has
>considerable gain in the direction of both ends if no terminating
>resistance is used. Most of this gain is dissipated by the lossy earth
>that is so close to the antenna, but enough remains to make the Beverage
>competitive with the quarter-wave vertical which has no gain over a
>dipole and over poor soil can itself have considerable loss, but it is
>not so lossy as the Beverage.

I've had Beverages since 1970 or earlier in many dofferent locations.
I've never seen one get within 15-20 dB of a vertical on 160 meters.
No one else I known over the years has seen one equal a vertical
either.

They don't model that way, they don't work that way.

> So, according to the War Department, the
>signal transmission and reception capabilities in the directions most
>favored by the Beverage are the same as for the non-directional
>quarter-wave vertical. The Beverage`s ground loss just about offsets its
>directional gain so that it is equivalent to a quarter-wave vertical
>over lossy soil.

A Beverage installed over lossy ground is down so far it's very poor as a transmitting antenna, the directive pattern is about what you can get from two verticals phased.

Been there, done that....and so have hundereds of other people. Get a MODERN copy of text showing Beverage performance and you'll not find anyone who agrees with what the War Department imagined was happening.

73 Tom

2179. Re: Help! How Do I bring My Coax Through The Wall Without Offending Wife?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: David Molvin <wa3nko@ix.netcom.com>
Message-ID: <8q0g3g$s63$1@slb6.atl.mindspring.net>
Source record: 180590

Cut a piece of wood. Insulate i all around. Drill some holes thru it for
the coax and ground wires. Put this wood in the open window. DONE.. Just
don't forget to LOCK the window somehow.
"Jim Hahn" <jimboL51@home.com> wrote in message
news:39BAFDD6.FD071E41@home.com...
> I need your guys help! After being out of amateur radio for 32 years,
> I'm getting back into it with some vintage Heathkit gear. Problem is
> CC&R's and Wife. I'm putting up one of those Spider antennas off of our
> rear metal fence which overlooks a canyon and which will serve as the
> ground. I know that it is not idea, but is really the best that I can
> do as I cannot run any other kind of antenna which will not be observed
> by the neighbors and wife. I've really got to keep the whole thing
> rather stealthy. Problem is that my wife just found this tube that I
> picked today from Radio Shack which claims to be able to bring your coax
> through the wall and keep the whole affair waterproof. She had a fit
> stating that " you are not going to be drilling any hole through our
> walls". Can you all out there help me out so I can find a simple way
> to bring my coax into my rig room without drilling holes ie through the
> window somehow? Life was much simpler at the age of 16 with my Johnson
> Viking Valiant and SX-101 and 40 meter dipole at my parents house!
> Thanks! Jim Hahn in San Diego
>
>
>

2180. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916150437.08767.00000409@ng-cd1.aol.com>
Source record: 180591

>>Funny, my usually well informed sources state that this activity will
>>not be attended at all!! Must be a rather good secret! (Fracky,you
>>have some folks close around you that really can't stand your behavior)

Better get a new mole Chuck...
.
Had 24 folks(most hams) at the open house, and 5 no -shows.

I will definitely do this again. There's really such a disparity between the sour attitude of a handful of people on this NG and the real, fun, and warm camaraderie of hams in real life.

Unfortunately 10M is deaddeadead at least to Europe. Got on 20M a bit.

One fellow put me on the horn with his buddy and , well, let's say the new economy has some quick closes!

I'll do one again in the Spring and make it more widely advertised. I want to keep these events non-commercial in spirit and presentation. I truly feel hams need to embrace fractal antenna technology or get left behind, at least in knowing the state of the art..

Should have come, Chuck! But, then again, you've been invited here before and didn't show...

73!
Chip N1IR

2181. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3c3e3.120808349@news.akorn.net>
Source record: 180592

On 16 Sep 2000 08:21:02 GMT, fractenna@aol.com (Fractenna) wrote:

>neighbors--especially those who are also good friends; My ERP (actually its
>EIRP) couldn't possibly be 12,000 watts as I am incapable of producing a
>kilowatt of output power;and finally you have profoundly misquoted an earlier
>post, Here it is:
>
><<IF I was running a KW, then my far field ERP would be close to 12,000 watts.

Dream on. A 10,8 dB gain Fractal? Or is Chip's ERP a "special" ERP?
Does Chip think his efficiency is 800%??

73 Tom

2182. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916150828.08767.00000410@ng-cd1.aol.com>
Source record: 180593

>>On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<
>
>At 60% efficiency, I get 510 Watts CW output. Add in the driver
>contribution,
>and that's 610 watts output. Correct for power supply sag between CW and SSB
>duty cycles and you pick up another 20%--perhaps 730 watts output on voice
>peaks. Anyone find that an unreasonable assessment for those CW input
>numbers?
>
>Rick K1BQT
>

Uh...this is wrong. But I don't want to embarrass you.

I measured --if you believe MFJ wattmeters--520 watts out. That's CW. There is NO WAY I would run that high a setting on phone, as I can tell you right now it run NON-LINEAR at that power level. Splatter? No thanks.

I never run the amp past 400mA peaks on phone.

Anyway, has ANYONE been able to get 1 KW out from an SB 220 on 10M--with a 120V line?

73
Chip N1IR

2183. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3c4ef.121076936@news.akorn.net>
Source record: 180594

Move over dB volts.....

On 16 Sep 2000 14:31:50 GMT, fractenna@aol.com (Fractenna) wrote:

>Sigh!
>Thought I'd show some of the OM's this NG waiting for 10 to open:-)(
>Terry,
>I get 2300 volts idle and 1700 volts on with 120volts line. If you have 240v
>set I bet you can get better than that.
>73
>Chip N1IR

Transformers have a RATIO.

If you run the SB220 on 120 volts or 240, the no-load high voltage is
EXACTLY the same.

73 Tom

2184. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <u5e7ssof3oe9l0j0kavj805m12guscp931@4ax.com>
Source record: 180595

On 06 Sep 2000 11:46:20 GMT, w1rfi@aol.com (W1RFI) wrote:
>
>>Compare this to operators of cellular-phone systems, wireless
>>networks, studio-transmitter links, and other fixed point-to-point
>>and satellite installations in highly populated environments,
>>not to mention cell-phones and other devices themselves, all of
>>these operating well into the UHF-plus part of the spectrum.
>
>>Many, many of these are woefuly far from compliance, as are a
>>good number of FM broadcast and TV stations.
>
>Could you share with us the evaluations you have done on these stations to
>demonstrate that they are woefully out of compliance? I have done some rough
>calculations for a few cellular installations for hams with quesitons and
>determined that they were well within compliance. The broadcast stations have
>much more stringent requirements than Amateur Radio, so I am curious; on what
>basis have you determined non-compliance?

Broadcast installations on urban roof tops can have compliance problems.

When we did compliance studies on our installation, with the antenna on
a 1040 foot tower in a suburban location, we were easily within compliance.
Even with 632,000 watts ERP up there, RF field strength at ground level
is well within the guidelines. We removed all two way equipment from the
tower (to reduce wind loading when we added the HDTV antenna), so there
are no longer issues with controlled exposures to workers servicing such
equipment. (I lost my repeater site on the tower due to this.)

But our competitors on channels 54 and 69 with antennas mounted on
downtown roof tops have had problems. The first and most obvious problem
is that they had to interlock access to their rooftops. In other words, their
transmitters have to shut down any time anyone goes out onto those
roofs.

This is a problem since the roofs are shared with other communications
services, and with the mechanical equipment for the buildings. So when
building maintenance needs to go out on the roof to grease the pumps
and blowers on the cooling towers (a daily chore), the stations had to
shut down. To get around this problem, the stations had to pay to have
such equipment replaced with water-water heat exchangers that don't
have to be located on the roof. This was very expensive. They still have
to shut down when the two way companies (or hams, we have a repeater
on the same roof top as Ch 54) need to change or repair an antenna or
feedline on the roof top. (In fact *everybody* has to shut down, because
the exposure regulations are for the total net field of all emitters at the

site.)

There were also problems with the mechanical rooms below roof level where elevator equipment and two way communications equipment racks are located. The stations have addressed that by installing shielding to lower the RF levels in these areas. This has not been simple since there are many feedlines coming from antennas on the roof to the equipment racks in the rooms below. Lots of common mode chokes have been required to keep the cables passing through the roof shield from conducting excessive RF down into the equipment rooms.

Of course these are all controlled exposure situations. Problems with uncontrolled exposures to the general public are less, but not totally absent. The inverse square law comes into play. Height and distance are our friends in reducing uncontrolled exposures. But workers in offices in nearby buildings could suffer excessive exposures. Metallic tinting on the windows of those offices took care of that. (The curtain walls have enough metal mesh in them to provide adequate shielding, but the windows were a problem.)

Some AM stations have had issues too. One station, which was originally in a rural location when it was built 75 years ago, is now in the middle of urban sprawl. In fact, it is in the parking lot of a mall. They have had to close off a portion of that parking lot to come into compliance with the uncontrolled exposure limits. (The limits are higher at low frequencies, but the antennas are at ground level, so the inverse square law isn't as helpful as it is for installations with the antenna well up in the air.)

STLs and fixed point to point links generally haven't been a problem. For obvious reasons, they are aligned to avoid having the beam pass through buildings or other points the public might frequent. They are also quite low power, in the 1 to 10 watt range. There are still some controlled exposure issues, IE don't stare into the feedhorns, but typically nothing of real concern.

Our satellite uplink truck is the biggest concern. It runs up to 600 watts into a 2.1 meter dish. It is possible to cook hotdogs held on a wooden skewer in front of the mouth of the feedhorn. But the dish points generally up when in use, and the public can't easily get to a point in the beam. Our truck operators do have to exercise some care to avoid excessive exposures when working around the feedhorn (the beam spreads when it illuminates the dish, so intensity is much less anywhere except right at the feedhorn.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2185. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <k3j7sscrg7jl8unhaegg6qkpsm4r08qkha@4ax.com>
Source record: 180596

On Wed, 6 Sep 2000 08:03:14 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:
>Yuri, K3BU wrote:
>"There is a big difference, just ask Joe WA2SPL, he had his eyeballs
>almost cooked when he stuck his head in the UHF antenna when someone
>keyed the kilowatt."
>
>I`m dubious of the r-f hazards speculated by some. I`ve been radiated
>over many decades by by high power at frequencies from the aircraft
>beacon range to 6 GHz. Got an ear blackened by a 50-KW h-f transmission
>line. Climbed an a-m broadcast tower the same way everybody at the time
>did, that is while it was transmitting at full power. I`ve measured the
>illumination of microwave dish surfaces. I`ve worked day after day in
>shortwave broadcast antenna fields immersed in megawatts and more.

Hmmm. This could explain a lot. :-)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2186. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <%ZPw5.7826$is5.348409@nntp1.onemain.com>
Source record: 180597

Is this antenna a joke, or does it have merit?

www.c2i2.com/~lasono/dovetron/main.shtml

de jerry...

2187. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3cb50.122710177@news.akorn.net>
Source record: 180598

On 16 Sep 2000 16:15:36 GMT, k1bqt@aol.com (K1BQT) wrote:

>>On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<
>
>At 60% efficiency, I get 510 Watts CW output. Add in the driver contribution,
>and that's 610 watts output. Correct for power supply sag between CW and SSB
>duty cycles and you pick up another 20%--perhaps 730 watts output on voice
>peaks. Anyone find that an unreasonable assessment for those CW input numbers?
>
>Rick K1BQT

Rikki,

You are using a common misconception to estimate feedthrough that is
not accounted for in power input readings.

The current increase caused by driver feedthrough is already added to
the plate input power. A portion of the drive power contribution to RF
output already shows on the current meter.

The voltage contribution by the driver does not show, because the
meter reads HV from the supply instead of the voltage diffeerence
between the anode and cathode.

Adding the RMS cathode voltage on the negative exciter swing at the
cathode to the HV gives the approximate "hidden" contribution by the
exciter. Multiply that quantity by the efficiency to get the output.

You'd be lucky if the driver is contributing 30 watts to the output.

73 Tom

2188. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C3CC84.84AB4621@bigfoot.com>
Source record: 180599

Mak wrote:
> Earthed counterpoise - a few (only a few unfortunately) radials same length
> as long wire but including the down lead drop.

The down drop becomes part of the radiating system. Your antenna will
be like an off-center fed dipole with a "bottom hat". If the distance
from the feedpoint to the end of the radials is about 1/2WL, you should
be in pretty good shape. Why don't you model your antenna? There's a
free demo version of ELNEC available from www.EZNEC.com

Seems you could feed your antenna at ground level in which case it
becomes an inverted-L. If you run your down lead drop close to your
coax, the coax shield might as well not be there.
--
http://www.mindspring.com/~w6rca

2189. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C3CEB5.1D1D@wt.net>
Source record: 180600

'Doc wrote:
>
> Mak wrote:
> >
> > Gentlemen, your estimates please on the impedance of my proposed HF
> > aerial:-
> >
> > Resonant long wire (hopefully), earthed from the feed point near the top of
> > my house.
> >
> > I ask because I need to feed it with coax and guess I will need a balun up
> > there to help match it. Any ATU has to be at the other end of the coax (tx)
> > and (obviously) I don't want the coax radiating.
> >
> > 73s.
>
> Mak,
> I have no idea what the input impedance will be, except to
> expect it to be higher than 50 ohms. With out knowing a lot
> more about how you plan to use it, the surrounding objects, etc,
> it's not really possible to guess the input impedance.
> A balun won't do much good (Not a balances antenna to start
> with).
> A second floor 'earth', or ground, isn't the easiest thing
> to realize. Dropping various length counterpoises from your
> feed line exit point may help. The earth system at ground level
> may not be of much use (shouldn't hurt, though).
> It's only personal experience, but I've never had much luck
> with long wire, or random wire antennas. Too lazy to put in a
> good RF 'earth'/ground system is part of the reason...
> 'Doc

I kind of agree. I've never been a great fan of random wires. If I were to do what he wants to do, which seems to be running a appx 1/4 wave or longer of "random wire", I think I would just hang a radial for each band from the feedpoint of the antenna and let it just hang or slope down towards the ground, but not touching or connecting to ground. In effect I would be using a vertical dipole. Not the greatest setup, but at least the antenna has a radial to work against. But you will need a resonant radial for each band to be used. Trying to run wires to a counterpoise at ground level will be very unpredictable and the wires will act as part of the antenna. But even with the radials it will be unpredictable for many bands with the single random wire. I don't know if it's possible, but he would be much better off trying to string up a

dipole of any length and feeding with ladder line to the tuner at the
shack. MK
--
http://web.wt.net/~nm5k

2190. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q0jc4$7fq$1@neptunium.btinternet.com>
Source record: 180601

Download program ENDFEED from my website. It will be of
interest. Takes only e few seconds. Not zipped up. Run
immediately. Input data on a "what-if ?" basis.

Reg.

--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Mak <Asylum140@NOSPAMbtinternet.com> wrote in message
news:8pvubpnir1@neptunium.btinternet.com...
> Gentlemen, your estimates please on the impedance of my
proposed HF
> aerial:-
>
> Resonant long wire (hopefully), earthed from the feed
point near the top of
> my house.
>
> I ask because I need to feed it with coax and guess I will
need a balun up
> there to help match it. Any ATU has to be at the other
end of the coax (tx)
> and (obviously) I don't want the coax radiating.
>
> 73s.
>
>

2191. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C3D46F.D14@wt.net>
Source record: 180602

K1BQT wrote:
>
> >On this one, which is on 120v, I can get 850 w IN, tops, on 10M.<
>
> At 60% efficiency, I get 510 Watts CW output. Add in the driver contribution,
> and that's 610 watts output. Correct for power supply sag between CW and SSB
> duty cycles and you pick up another 20%--perhaps 730 watts output on voice
> peaks. Anyone find that an unreasonable assessment for those CW input numbers?
>
> Rick K1BQT

I wonder why someone would run a dual 3-500z amp with insufficient wiring. No real problem running 110v, and the amp should do fairly close to normal assumming you have the thick wiring to handle it. "For the sb-220 seems 30 amps at 110v would be about the right wiring". And I'd have to wonder about the amp if it only did 2300v at idle. Sounds kinda puny for a sb-220. Heck my sb-200 does 2400v at idle. "dual 572b". My dual 3-500z amp a henry 2k classic. It's idles at about 3200-3400v depending on voltage on high tap. The guy I got it from used it on 110v for a while. I got a full KW output on 10m according to his test notes. But usually at that point he would blow his breaker... He had to idle it back to keep the breaker happy for that room. Myself, I run it from 220v. Actually, more inline with 235-245v being we have happy voltage here. My henry will do nearly 1300-1400w with 100w drive on 80/40 etc. And my high voltage will only drop maybe 150-200 volts. Say 3200 down to 3000-3050 or so if I remember right. Much stiffer PS than the heath. The meter bairly moves on normal SSB speech. But, I'm gonna switch to solid state PA before long. Will keep the henry for heavy duty stuff. New amp likely will only be 500-600 watts or so. And I'm gonna build it to save money.Well, enough for this non antenna talk... MK
--
http://web.wt.net/~nm5k

2192. VLF antenna/receiver grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Cindy Salwen <csalwen@northeast.net>
Message-ID: <33m7ssoufbkuvsa09t81ktk4ebfn64q8j3@4ax.com>
Source record: 180603

Hello,

I have an HP10509A VLF loop antenna sitting on top of a 10m tall steel pipe mast which is set into a concrete base. The coax connector on the antenna has its shield connected to the antenna body which is (I assume) electrically grounded down through the mast. I have a lightning arrestor in a weather-proof metal box mounted to the base of the mast and also grounded to an 2.5m ground rod. So the antenna is also grounded through the coax shield. I have a connection from the ground rod to the water pipe which comes from the street main, which is also where my breaker box is grounded.

I have some questions:

1) Should I somehow interrupt the coax shield that runs from my HP117 VLF receiver to the arrestor box to avoid a ground loop? (The receiver is 'power' grounded through the power cord to the breaker box, and most likely through the electronics rack along with all of the other equipment.)

2) Should I interrupt the center conductor of the coax with a HV capacitor? (I have a 10nF 15kV cap I can use. Would that be OK at 60kHz?)

3) If the answer to 2 is yes then I need to provide the antenna with 35VDC to power its preamp. Should I ground the power supply's case to the breaker box but have the output 'floated' relative to the breaker box and grounded at the mast base?

Any help would be appreciated.

Thanks,

Scott

--

Scott Coburn scott@bnl.gov
Brookhaven National Laboratory
Building 510B tel 631 344 7110
Upton NY 11973-5000 fax 631 344 2739

2193. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <mcm7ssgqvtavto1fgiit2isg0ckko392v3@4ax.com>
Source record: 180604

On Fri, 8 Sep 2000 05:51:33 -0400, "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote:
>Thread:
>
>I worked in downtown Atlanta for a number of years and my office window
>looked right out over the GA Tech campus at about the 40th floor level.
>
>I always wondered when I looked at the midtown AM antenna of WSB...
>
>WSB's AM clear channel MW tower is in midtown Atlanta. What are the EMI
>levels a few blocks away at several hundred feet above sidewalk level?

WSB's AM antenna is not in midtown Atlanta, never has been. It is in DeKalb
county, about 7 miles east of midtown. If this was more than 15 years ago,
you may be thinking of WGST. WGST's antenna was on the Georgia Tech
campus (the Georgia School of Technology station), but it was moved to north
Dekalb county when it was sold to Clear Channel Broadcasting. There are no
AM transmitting sites in midtown at present.

>In some of the local Atlanta skyscrapers, say the BellSouth tower or
>NationsBank tower, etc... the folks sitting at their office desks 8 hours
>per day 5 days per week probably feel that they can almost reach out and
>touch that 50 kW clear channel MW antenna.

The only midtown broadcaster is WTBS, with transmitter and tower located
at 1018 West Peachtree. The tower is 1040 feet AGL, and the ERP is 5 MW
(peak) on channel 17. The roof of the Bell South tower is 618 feet AGL, well
below the main lobe, and is 8 blocks away.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2194. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C3DEBC.959981A3@oltraining.com>
Source record: 180605

Tom my experience too. My meter actually shows 2.2 KV and 2.7 KV in the low and high power positions (CW/Tune and SSB).

Terry - W6LMJ

Tom W8JI wrote:

> Move over dB volts.....
>
> On 16 Sep 2000 14:31:50 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >Sigh!
> >Thought I'd show some of the OM's this NG waiting for 10 to open:-)(
> >Terry,
> >I get 2300 volts idle and 1700 volts on with 120volts line. If you have 240v
> >set I bet you can get better than that.
> >73
> >Chip N1IR
>
> Transformers have a RATIO.
>
> If you run the SB220 on 120 volts or 240, the no-load high voltage is
> EXACTLY the same.
>
> 73 Tom

--

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| Web Site Design
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(561) 357-0842 FAX | Keynote Speaker
| SDL and Educational Research

2195. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C3E0DE.91644A57@hiwaay.net>
Source record: 180606

I dont know- but he uses the same advisor that Chip does. A guy named
"Pat Pending", no address given.

Bill-W4BSG

JerryL wrote:
>
> Is this antenna a joke, or does it have merit?
>
> www.c2i2.com/~lasono/dovetron/main.shtml
>
> de jerry...

2196. Re: Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2197-39C3DCC6-6@storefull-114.iap.bryant.webtv.net>
Source record: 180607

Steve, N9MGB wrote:
"I just have too many tall SW trees."

Too bad you are situated so far North. But, if there is a clearing within sight of the satellite and cable distance of your house, a ground-supported dish might be practical.

Best regards, Richard Harrison, KB5WZI

2197. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000916173658.05871.00001030@ng-cb1.aol.com>
Source record: 180608

>You'd be lucky if the driver is contributing 30 watts to the output.<

Drat. Wrong again! Kick, kick, poot! Well, okay. Apparently nobody came and hauled Chip away, so he must not have caused any problem for them.

Pehaps I worry too much. Like Piglet. Bet I could take something for that.

73

Rick K1BQT

2198. How do i convert TV 5 element Antenna to 2 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: harryvetch@my-deja.com
Message-ID: <8q0q15lnu1@nnrp1.deja.com>
Source record: 180609

I have a new TV antenna that needs to be converted to 2 meters. So far have drilled out the elements and cut them to length acroding to at least one web site advertised on arrl. what gets me is ive come acrost more then one with different specs. Can somone tell me which is the right way? 16 inch or 20 inch spacing between elements? This is just one example these pages state.

Thanks
Lorin
KB7TFW

Sent via Deja.com http://www.deja.com/
Before you buy.

2199. Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: kb9olm@hotmail.com
Message-ID: <8q0r6q$n10$1@nnrp1.deja.com>
Source record: 180610

Please help guys!
I need a 9:1 balun for the Van Gorden "shorty" all band dipole, which is fed with a 450 ohm balanced transmission line. I am running up to 150 watts to antenna.
Please reply directly to Vlad at: kb9olm@hotmail.com
Tnx,
Vlad
kb9olm

Sent via Deja.com http://www.deja.com/
Before you buy.

2200. Post Error Correction

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sattvro@yahoo.com
Message-ID: <8q0ras$n1m$1@nnrp1.deja.com>
Source record: 180611

Hi
Thanks

I am sending this message to all who replied on
the MFJ Tuner. Also sending in the order received.

This is embarassing
QLF QLF ON MY PART

The MFJ Tuner Brought 17 emails in 2 hours and I could not figure out
why!
I only got one email for another item ''the 18 Ft. tower.

Then I read what my Clerk posted
Wow $15.00 HELP??!!!
Should be $65.00 and still a bargain.
My Clerk operates on qrp brain power.

So in the order of received e mails I will accept the first re bid for
$65.00
I do not want to make it a contest so no need to bid over.
It is my fault so I will not profit from it.

I apologize for the Trouble and to be fair I am correcting the Post.

Will be back to all re-bidders regardless if they do not get to buy it.

we accept paypal
www.paypal.com
or
prepaid with Cashiers check or money order.

Once again I am sorry for the trouble.

73's
kd6yn
Paddy

--
www.sattvrepair.com

Sent via Deja.com http://www.deja.com/
Before you buy.

2201. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q0t5g$i2h$1@slb0.atl.mindspring.net>
Source record: 180612

Mak:

I am sure that you will find and inverted "L" configuration easier to set up and operate.

Makes a great restricted space all band HF antenna.

Run the inverted L wire up and out for as long as you can manage, then feed it near the "actual" ground [not high up in the air as you propose] against "a few good counterpoises" of approximately 1/4 electrical wl at each of your favorite operating frequencies.

And then "force" feed the antenna against the counterpoises with a good low loss [read high power] tuner. If you find there is some frequency or band on which your tuner will not force feed the antenna, simply cut a couple of feet off the end of the inverted L and start over.

Lay these counterpoises out in the garden/yard and bend them to fit the available space.

Any random length for the aerial "L" shape should work well providing it is at least 1/3 wl at the lowest frequency you desire to use. Try Reg's program to see approximately what the impedances will be on your favorite bands.

If you wish to optimize things, "hand" tune the counterpoises at your favorite frequencies by cutting [shortening] the lengths of the 1/4 wave counterpoises for maximum counterpoise currents at those favorite frequencies.

Fun and easy to build and remarkably effective. Not a contest winning antenna set up but great for general all around hamming.

Over the years I have had great success with these "stealthy" easily hidden unobtrusive simple all band inverted L configurations.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
CAM <cam2338@bigfoot.com> wrote in message
news:39C3CC84.84AB4621@bigfoot.com...
> Mak wrote:
> > Earthed counterpoise - a few (only a few unfortunately) radials same
length
> > as long wire but including the down lead drop.

>
> The down drop becomes part of the radiating system. Your antenna will
> be like an off-center fed dipole with a "bottom hat". If the distance
> from the feedpoint to the end of the radials is about 1/2WL, you should
> be in pretty good shape. Why don't you model your antenna? There's a
> free demo version of ELNEC available from www.EZNEC.com
>
> Seems you could feed your antenna at ground level in which case it
> becomes an inverted-L. If you run your down lead drop close to your
> coax, the coax shield might as well not be there.
> --
> http://www.mindspring.com/~w6rca

2202. Beware of W4WWB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Kenn <kgeiger10@home.com.stuff>
Message-ID: <OSSw5.88151$Ur3.1058620@news1.sttls1.wa.home.com>
Source record: 180613
Cross-posted to: alt.radio.amateur,alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,es.rec.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital

I am deeply disappointed to warn you not to deal with Warren Brooks W4WWB. He advertised a radio on ebay that was complete, but needed some work. What arrived was a parts radio - Pieces were missing and it will not power up. After he ignored my emails I contacted him by phone and in his best good ole boy drawl he told me " you bought it, you own it". He would not allow me to return it for a refund. I know that ebay is a take your own risk venture - but deliberately lying about the condition of the radio to sell it is dishonest. What a disgrace to the ham community. Don't be suckered by this man like I was.

Kenn N7QPY

2203. Beware of W4WWB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Kenn <kgeiger10@home.com.stuff>
Message-ID: <yTSw5.88153$Ur3.1058852@news1.sttls1.wa.home.com>
Source record: 180614
Cross-posted to: alt.radio.amateur,alt.radio.amateur.club.clarc,alt.radio.amateur.club.taparc,es.rec.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

I am deeply disappointed to warn you not to deal with Warren Brooks W4WWB. He advertised a radio on ebay that was complete, but needed some work. What arrived was a parts radio - Pieces were missing and it will not power up. After he ignored my emails I contacted him by phone and in his best good ole boy drawl he told me " you bought it, you own it". He would not allow me to return it for a refund. I know that ebay is a take your own risk venture - but deliberately lying about the condition of the radio to sell it is dishonest. What a disgrace to the ham community. Don't be suckered by this man like I was.

Kenn N7QPY

2204. How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: W&B <azholguinfamily@earthlink.net>
Message-ID: <V5Tw5.1457$nk3.108548@newsread03.prod.itd.earthlink.net>
Source record: 180615

Would like to lay a 17M extended double zepp across the top of my roof, then feed with coax to the shack. How do I put together a matching section at the feedpoint?

Wade

2205. error in post Re: FS Antenna tower, stands and misc

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sattvro@yahoo.com
Message-ID: <8q10ibsko1@nnrp1.deja.com>
Source record: 180616

Hi
Thanks

I am sending this message to all who replied on
the MFJ Tuner. Also sending in the order received.

This is embarassing
QLF QLF ON MY PART

The MFJ Tuner Brought 17 emails in 2 hours and I could not figure out
why!
I only got one email for another item ''the 18 Ft. tower.

Then I read what my Clerk posted
Wow $15.00 HELP??!!!
Should be $65.00 and still a bargain.
My Clerk operates on qrp brain power.

So in the order of received e mails I will accept the first re bid for
$65.00
I do not want to make it a contest so no need to bid over.
It is my fault so I will not profit from it.

I apologize for the Trouble and to be fair I am correcting the Post.

Will be back to all re-bidders regardless if they do not get to buy it.

we accept paypal
www.paypal.com
or
prepaid with Cashiers check or money order.

Once again I am sorry for the trouble.

73's
kd6yn
Paddy

In article <8q08sb$309$1@nnrp1.deja.com>,
sattvro@yahoo.com wrote:
> Moving Sale Gilroy, Ca. Saturday thru Monday
> Please e mail sattvro@yahoo.com
> ph 408 842 6262
>
> Satellite tv tower and stands
> Great for ham antenna etc.
>
> 18 Ft. Tower (Schedule 40 Pipe)

> Plus Sleeve and Telescope section TO 25 Ft.
> For Sat TV, Ham Radio etc.. $70
>
> Sat TV Antenna Stands (pipe)
> 4 Feet, 4 In. O.D. $30
> 6 Feet, 3 1/2 In. O.D. $30
>
> ALL THREE ITEMS HAVE WELDED HEAVY GAUGE MOUNTS
> FOR BOLTING TO A CEMENT PAD
>
> Cushcraft Vertical
> Old but never used Needs Radials $15
>
> Antenna Tuner MFJ-962 $15
>
> www.sattvrepair.com
>
> --
> www.sattvrepair.com
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

--
www.sattvrepair.com

Sent via Deja.com http://www.deja.com/
Before you buy.

2206. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c3f77f.429235@news.akorn.net>
Source record: 180617

On 16 Sep 2000 19:08:28 GMT, fractenna@aol.com (Fractenna) wrote:

>I measured --if you believe MFJ wattmeters--520 watts out. That's CW. There is
>NO WAY I would run that high a setting on phone, as I can tell you right now it
>run NON-LINEAR at that power level. Splatter? No thanks.
>I never run the amp past 400mA peaks on phone.

That could be big time PEP power then. Seems like you don't know how
much power you run.

>Anyway, has ANYONE been able to get 1 KW out from an SB 220 on 10M--with a 120V
>line?
>73
>Chip N1IR

Yes. It's actually pretty common to get about that power out on either
120 or 240.

73 Tom

2207. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39c3fd6e.9520363@news.mcn.org>
Source record: 180618

Piglet???? Is that a ham wantabee?

Danny

On 16 Sep 2000 21:36:58 GMT, k1bqt@aol.com (K1BQT) wrote:

>>You'd be lucky if the driver is contributing 30 watts to the output.<
>
>Drat. Wrong again! Kick, kick, poot! Well, okay. Apparently nobody came and
>hauled Chip away, so he must not have caused any problem for them.
>
>Pehaps I worry too much. Like Piglet. Bet I could take something for that.
>
>73
>
>Rick K1BQT

2208. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916034313.19547.00000129@ng-cd1.aol.com>
Source record: 180634

>My son, today, shared a paper on EE engineering ethics. Not to be unkind,
>but
>sorry Charlie! Star-Kist PhD Radio Astronomers don't get to be Senior RF
>Engineers for major companies any more than MEd head-shrinkers do! I'll FAX
>you a copy of the code, if you like.
>
> Rick K1BQT
>

Oh, can you explain that to the headhunters please? I'm getting tired of the
phone calls, especially as I already have a position they can't match, let
alone beat!

What's that got to do with 'engineering ethics'?

73
Chip N1IR

2209. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916034740.19547.00000130@ng-cd1.aol.com>
Source record: 180635

>Funny, my usually well informed sources state that this activity will
>not be attended at all!! Must be a rather good secret! (Fracky,you
>have some folks close around you that really can't stand your behavior)
>
>Please provide the open house details to this group, since you
>found it necessary to post to the "alleged" attendee's on this NG...
>

GM Chuck;

Go look back to the original post from about 2 weeks ago. Unfortunately if you haven't signed up as of Tuesday you can't come.

73
Chip N1IR

2210. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916034925.19547.00000131@ng-cd1.aol.com>
Source record: 180636

>My son, today, shared a paper on EE engineering ethics.

I thought your son was a pre-teen? Not that I have a particular interest in your offspring; just my shaky recollection.

73
Chip N1IR

2211. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916035238.19547.00000132@ng-cd1.aol.com>
Source record: 180637

>Funny, my usually well informed sources state that this activity will
>not be attended at all!! Must be a rather good secret! (Fracky,you
>have some folks close around you that really can't stand your behavior)
>
>Please provide the open house details to this group, since you
>found it necessary to post to the "alleged" attendee's on this NG...
>

LOL-)!

How is it your 'contact' claims access to the guest list--but can't tell you
the details of the Open House??

Say hi to Chuck for me:-)

73
Chip N1IR

2212. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916042102.19547.00000133@ng-cd1.aol.com>
Source record: 180638

>Doesn't uncorking your station at the LDS PA system at the height of their
>event constitute misuse of one's ham privilege with the potential intent to
>violate a religious sect' s civil rigths??
There is no PA system; I do not interfere with the activities of
neighbors--especially those who are also good friends; My ERP (actually its
EIRP) couldn't possibly be 12,000 watts as I am incapable of producing a
kilowatt of output power;and finally you have profoundly misquoted an earlier
post, Here it is:

<<IF I was running a KW, then my far field ERP would be close to 12,000 watts.

Now: IF you were louder "anywhere" than me, BY 20 dB, then your ERP would be
1,200,000 watts.

That's 1,200,000 watts.!!!

Chuck--have you checked the minimum compliance distance on 10M for 1,200,000
ERP?

It sure sounds like a visit by the FCC would help you check your numbers
properly, or reduce your ERP to acceptable levels.

73
Chip N1IR>>

You've already calculated and
>published your ERP at 12,000 Watts (correctly or not), indicating a full
>understanding of your station's potential to commit harm through powerfully
>directed RFI.

No. That is not correct. I did not do so and I did not say that. However, IF I
was running a KW output, then the EIRP would definitely approach 12,000 watts
on the 10M FQY. For the gain, in dBi, above typical ground for my location (and
a cncise and clear comparison to a dipole) see :

http://www.fractenna.com/ham/hampage1.html

> Civil rights violations implemented by a member of another
>faith
>(intentional or not) would surely take precident

Do you mean 'president' or 'precedent'?

over FCC rules in any
>lawsuit
>or licensure hearing. Better check with your lawyer before you go for #311!
>
>I'm not kidding. If I were there, I wouldn't touch that microphone on a bet!

>

Why don't you present your case to the FCC? They are always welcome here.

I don't know nor care to understand your perverted view of the LDS Open House, but it is a wonderful event, with no 'PA'. No one is put out by it, and I, for one, thoroughly enjoyed it. Then again, sharing the happiness of my friends is always enjoyable.

Why don't you take the tour yourself? Their web site is:

http://www.bostontemple.org

If, after you tour, you end up being inspired to be contrite for some reason, you may also drop by and visit if I am around.

I don't know what dates are still open, but there is nothing special about Sept 16.

The dedication is Oct 1.

>
>Rick K1BQT
>

God bless you!

Chip N1IR

2213. KLM Log Periodic Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: James L Hall <trains@fidalgo.net>
Message-ID: <969093293.810342@mirror.fidalgo.net>
Source record: 180639

I looking for manual for the KLM 13-30-7
Log Periodic Antenna. Manual or copy would be great.

Thanks, Jim K7OET

2214. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <5tc6ss47haoll4u0dcn0t2do8v11upt2p8@4ax.com>
Source record: 180640

Hrm....

I could be wrong, but this sounds an awful lot like:

"IIIIIIII'm having a paaaaaaarrrrty and yooooooooou're not
inviiiiiiiiiited! Neeeener Neeeeener Neeeeeeeeneeeerrrrrrr!"

Of course, the last time I heard that, it was in about the 2nd grade,
so I might be mistaken.

-SSB

On or about 16 Sep 2000 07:47:40 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>Funny, my usually well informed sources state that this activity will
:>not be attended at all!! Must be a rather good secret! (Fracky,you
:>have some folks close around you that really can't stand your behavior)
:>
:>Please provide the open house details to this group, since you
:>found it necessary to post to the "alleged" attendee's on this NG...
:>
:
:
:GM Chuck;
:
:Go look back to the original post from about 2 weeks ago. Unfortunately if you
:haven't signed up as of Tuesday you can't come.
:
:73
:Chip N1IR

2215. Re: Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C33AE1.94DEC8D3@oio.net>
Source record: 180641

Steve,
First, forget about hinging a tower 100-120' tall, that just
won't be very practical.
If your not very familiar with erecting towers the best advice
for you is to talk to people who are, or a commercial out fit that
erects towers. There are a number of things that come into play when
dealing with towers that tall. Follow the recomendations of the
tower manufacturors, and you might over do those recomendations by
a bit (remember they are ~minimum~ safe standards).
I know this isn't very helpful about specifics, but there are
quite a number of things that depend on your location/conditions/etc.
'Doc

2216. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C33C6A.2AE1AD6B@oio.net>
Source record: 180642

Frac',
Should I watch the society pages to see the results of this
'party'? (or the 'want' ads?)
I certainly hope that my not attending this gathering hasn't
deterred anyone else from attending!
'Doc

2217. AM aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: "Paul.A.Bowden" <Paul.A.Bowden@btinternet.com>
Message-ID: <8pvh9j$58s$1@uranium.btinternet.com>
Source record: 180643

I know nothing about radio, but hope that one of you may be able to help with what will probably be a rather stupid question - please forgive it, if it is!

As part of a hi-fi system I have a NAD 4225 radio tuner, which I use for FM listening with an external aerial. However, I listen a lot to AM broadcasts (especially French LW stations around 1800 and 1300 metres), but can't do so on this tuner, there being no internal aerial. There is plenty of space outside for an external wire aerial, but I haven't the slightest idea of how to go about this or whether it would be of any use (I'm afraid it needs to be something cheap and do-able by a DIY moron)

I would be really grateful for any help - and apologies for lowering the tone and technical level of your group!

Thanks

Paul Bowden
(Lincolnshire, UK)

2218. Re: Force 12 ZR-3 Antenna Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <39C3565A.FF593904@earthlink.net>
Source record: 180644

Jim Hahn wrote:
>
> Is anyone familiar with the Force 12 ZR-3? Opinions? Thanks. Jim Hahn
> in San Diego

There was a review of it and other space efficient antennas in the May
1998 QST. It compared the ZR-3, Hexbeam, ISOTRON and the
Alpha-Delta/Outbacker thing to an R7000.

Phil

2219. Re: Force 12 ZR-3 Antenna Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <39C35666.AA5FE72A@earthlink.net>
Source record: 180645

Jim Hahn wrote:
>
> Is anyone familiar with the Force 12 ZR-3? Opinions? Thanks. Jim Hahn
> in San Diego

There was a review of it and other space efficient antennas in the May
1998 QST. It compared the ZR-3, Hexbeam, ISOTRON and the
Alpha-Delta/Outbacker thing to an R7000.

Phil

2220. Re: Force 12 ZR-3 Antenna Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Phil Wheeler <w7ox@earthlink.net>
Message-ID: <39C3566D.46A973E3@earthlink.net>
Source record: 180646

Jim Hahn wrote:
>
> Is anyone familiar with the Force 12 ZR-3? Opinions? Thanks. Jim Hahn
> in San Diego

There was a review of it and other space efficient antennas in the May
1998 QST. It compared the ZR-3, Hexbeam, ISOTRON and the
Alpha-Delta/Outbacker thing to an R7000.

Phil

2221. W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <39c3605a@turakina.six.asn.au>
Source record: 180647

I am interested in making a trap dipole as described by W8NX in August 1994 QST. I need to build the 80, 40, 20, 15 & 10 metre version.

My trouble is that in Australia the section of the 80 metre band that is predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz). The antenna described has an unsatisfactory SWR at these frequencies and is tuned more to 3.8MHz.

I do not know which section of the antenna to lengthen to lower the resonant freq on this band without affecting the other bands. If someone could let me know what to do I would appreciate it.

Michael Hart
VK2JXI

2222. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000916085747.27481.00001401@ng-mg1.aol.com>
Source record: 180648

How many dB down is "close to" running a 150 watt exciter and a pair of 3-500s? The risk is real, and I shared it with you lest innocent ham radio "fun" turn ugly. If you had lettuce stuck between your teeth or an open fly, wouldn't you want to know?? Sorry if I offended you.

73

Rick K1BQT

2223. Re: W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C36FD6.1A2DBF8E@oltraining.com>
Source record: 180649

Lengthen the wire on the end of the dipole - just beyond the 40 meter traps.

Terry - W6LMJ

Michael Hart wrote:

> I am interested in making a trap dipole as described by W8NX in August 1994
> QST. I need to build the 80, 40, 20, 15 & 10 metre version.
>
> My trouble is that in Australia the section of the 80 metre band that is
> predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz). The
> antenna described has an unsatisfactory SWR at these frequencies and is
> tuned more to 3.8MHz.
>
> I do not know which section of the antenna to lengthen to lower the resonant
> freq on this band without affecting the other bands. If someone could let
> me know what to do I would appreciate it.
>
> Michael Hart
> VK2JXI

--

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2224. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916090622.12832.00000075@ng-cc1.aol.com>
Source record: 180650

>How many dB down is "close to" running a 150 watt exciter and a pair of
>3-500s?
> The risk is real, and I shared it with you lest innocent ham radio "fun"
>turn
>ugly. If you had lettuce stuck between your teeth or an open fly, wouldn't
>you
>want to know?? Sorry if I offended you.
>
>73
>
>Rick K1BQT
>

Am busy putting out food; don't understand yourt question.

In the far field, with reasonable ground models, 10.8 dBi for a 2 element yagi
is very reasonable as an assumption.

What's with this 1 KW stuff? The best I can get IN on my SB220 on 10M is 1/2
amp at 1700 volts. How is that a KW OUT??

73
Chip N1IR

2225. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <7ds6sscafepfoqd2to10rk35ld0ffi2oma@4ax.com>
Source record: 180651

On or about 16 Sep 2000 13:06:22 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:What's with this 1 KW stuff? The best I can get IN on my SB220 on 10M is 1/2
:amp at 1700 volts. How is that a KW OUT??
:
:73
:Chip N1IR

1700volts @ 1/2 Amp is still 850 watts (I can do basic math.) Then
assume the amp is 50% (ballpark figure here) efficient. 425 Watts,
there. Then the db loss from the Frick&Fracktenna, and you might be
radiating about a watt and a half. ::snicker::

Just my two cents, your mileage may vary.

-SSB

2226. Re: KLM Log Periodic Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39c366f7.719099@news.mcn.org>
Source record: 180652

Have you checked with Mike at M2? He is supposed to be offering
support for KLM antenna products..

http://www.m2inc.com/

Danny, K6MHE

On Sat, 16 Sep 2000 01:35:33 -0700, "James L Hall"
<trains@fidalgo.net> wrote:

>I looking for manual for the KLM 13-30-7
>Log Periodic Antenna. Manual or copy would be great.
>
>Thanks, Jim K7OET
>

2227. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Lumpy <lumpy@digitalcartography.com>
Message-ID: <39c37d0a@news.peakpeak.com>
Source record: 180653

Fractenna wrote:
> ...Please make sure to park at the place
> indicated on the map, or you will be
> towed...Police take notice...

I'm retired now, but still have a lot of
contacts on police depts all over the US.
The police are very familiar with Chip
in his jurisdiction but when I talked
with my old academy chum day before
yesterday, he said there are no
alerts regarding the open house re
parking or any other problems. There
are no special plans to tow anyone that
parks legally on a public street.

I'm in town this weekend. Haven't seen anything
special happening this am so I went back to work.

They've heard of you, Chip, but just
not this time.

Retired Sgt Lumpy

2228. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916095410.02634.00000180@ng-cr1.aol.com>
Source record: 180654

>Fractenna wrote:
>> ...Please make sure to park at the place
>> indicated on the map, or you will be
>> towed...Police take notice...
>
>I'm retired now, but still have a lot of
>contacts on police depts all over the US.
>The police are very familiar with Chip
>in his jurisdiction but when I talked
>with my old academy chum day before
>yesterday, he said there are no
>alerts regarding the open house re
>parking or any other problems. There
>are no special plans to tow anyone that
>parks legally on a public street.
>
>I'm in town this weekend. Haven't seen anything
>special happening this am so I went back to work.
>
>They've heard of you, Chip, but just
>not this time.
>
>Retired Sgt Lumpy

The police will be requested to make arrests if, and as, needed.

Nathan Cohen, Ph.D.

2229. Re: W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <s9v6sssjqr8r476lbsihsg5pce3se01obg@4ax.com>
Source record: 180655

Wouldn't the 40m trap be the one towards the tip, away from the
feedpoint?

-SSB

On or about Sun, 17 Sep 2000 00:30:57 +1100, "Michael Hart"
<mhart@NOSPAM.terrigal.net.au>, using the forum
rec.radio.amateur.antenna did say:

:Thanks Terry,
:
:There are THREE wires beyond the 40m trap. They are a 4.9foot section then
:a 6foot branch (capactive load it is called) then a 16.1foot section. My
:initial guess was to lengthen the 16.1' section [by how much I don't know]
:but it seems you are suggesting to lengthen the 4.9' section. I would have
:thought this would also affect the other HF bands then.... Can you confirm
:this is the right section to lengthen please.
:
:rgds.
:
:Michael
:
:Terry Redding wrote in message <39C36FD6.1A2DBF8E@oltraining.com>...
:>Lengthen the wire on the end of the dipole - just beyond the 40 meter
:traps.
:>
:>Terry - W6LMJ
:>
:>Michael Hart wrote:
:>
:>> I am interested in making a trap dipole as described by W8NX in August
:1994
:>> QST. I need to build the 80, 40, 20, 15 & 10 metre version.
:>>
:>> My trouble is that in Australia the section of the 80 metre band that is
:>> predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz).
:The
:>> antenna described has an unsatisfactory SWR at these frequencies and is
:>> tuned more to 3.8MHz.
:>>
:>> I do not know which section of the antenna to lengthen to lower the
:resonant
:>> freq on this band without affecting the other bands. If someone could
:let
:>> me know what to do I would appreciate it.

:>>
:>> Michael Hart
:>> VK2JXI
:>
:>--
:>-----------
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:

2230. End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Mak <Asylum140@NOSPAMbtinternet.com>
Message-ID: <8pvubpnir1@neptunium.btinternet.com>
Source record: 180656

Gentlemen, your estimates please on the impedance of my proposed HF aerial:-

Resonant long wire (hopefully), earthed from the feed point near the top of my house.

I ask because I need to feed it with coax and guess I will need a balun up there to help match it. Any ATU has to be at the other end of the coax (tx) and (obviously) I don't want the coax radiating.

73s.

2231. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39C37EA5.28AC9F04@attglobal.net>
Source record: 180657

Thanks Tom! I've gt a big 70 acre field above my house (I'm in a glen).
I'm in Maryland and that would be due east so I may try laying one out
some time towards Europe (after the farmer takes tha corn off).

thanks again for taking the time.

Wayne
N3TNS

Tom W8JI wrote:

> On Fri, 15 Sep 2000 21:01:43 -0400, Wayne Grauel
> <wgvideo@attglobal.net> wrote:
>
> >OK Tom (and group), I'm learning a lot here, ...
> >
> >1. What is a beverage antenna?
>
> It was named after a fellow who worked for RCA named Beverage.
> It's a simple long low longwire, usually terminated in a resistor to
> make it uni-directional towards the resistor.
>
> It has about 450-600 ohm impedance, usually. The impedance varies with
> height and soil conditions, as well as wire size.
>
> >2. In lay terms, why does it work so well to the ground
>
> It doesn't work "well" so far as gain goes. It is a rather lossy
> antenna, usually around 20 dB weaker than a full size antenna. For
> receiving that isn't important, because any lack of gain can be made
> up in a amplifier ahead of the receiver.
>
> It works because the earth below the antenna is lossy, and that loss
> causes a potential difference along the earth. One way to view it is
> the wave "tilts" because of ground loss, so the wire "sees" that
> tilted wave.
>
> With lossless ground below the antenna, a Beverage will almost go
> dead!
>
> The long length makes it directional, and that reduces unwanted
> noises.
>
> It is a very ineffective way to get directivity, but that is offset by
> the ease of construction. It is a very "forgiving" antenna, even if

> you don't install it perfectly it's hard to mess it up.
>
> >3. What effect does his resistor in the end have (if any)
>
> It makes it more uni-directional. Even without the resistor, the
> Beverage is somewhat unidirectional firing away from the feedpoint.
>
> The resistor terminates the antenna, and reduces standing waves in the
> wire. That's what makes it unidirectional. Ground losses below the
> antenna make it somewhat unidirectional even without termination,
> especially if the antenna is long interms of wavelength.
>
> Once it's about two wavelengths long, you are about at the limit of
> performance increase with length.
>
> >4. Does this work for transmission too or better for just reception?
>
> It's a poor transmitting antenna, because of earth losses.

2232. Re: W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C37F96.8C3D6A@oltraining.com>
Source record: 180658

If you assume the electrical length of the 80 meter dipole is 468/f MHz or 468/3.8 MHz or about 123.16 feet. And if you compute the target electric length as 468/3.6 MHz or about 130.00 feet. You can then compare the two computed lengths (130.00 - 123.16 = 6.84 feet) and conclude that the overall length of the antenna must increase by about 6.84 feet in order to lower the 80 meter operating frequency from 3.8 to 3.6 MHz.

I am not sure how the capacitive hats effect the antenna other then to generally assume they allow the antenna to be shorter and possibly a bit more broad banded. So I would start by dividing the 6.84 in half and then adding the resulting 3.42 feet to both sides of the dipole, just past the 40 meter traps, and then see where the SWR plots.

Terry - W6LMJ

Michael Hart wrote:

> Thanks Terry,
>
> There are THREE wires beyond the 40m trap. They are a 4.9foot section then
> a 6foot branch (capactive load it is called) then a 16.1foot section. My
> initial guess was to lengthen the 16.1' section [by how much I don't know]
> but it seems you are suggesting to lengthen the 4.9' section. I would have
> thought this would also affect the other HF bands then.... Can you confirm
> this is the right section to lengthen please.
>
> rgds.
>
> Michael
>
> Terry Redding wrote in message <39C36FD6.1A2DBF8E@oltraining.com>...
> >Lengthen the wire on the end of the dipole - just beyond the 40 meter
> traps.
> >
> >Terry - W6LMJ
> >
> >Michael Hart wrote:
> >
> >> I am interested in making a trap dipole as described by W8NX in August
> 1994
> >> QST. I need to build the 80, 40, 20, 15 & 10 metre version.
> >>
> >> My trouble is that in Australia the section of the 80 metre band that is
> >> predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz).
> The

> >> antenna described has an unsatisfactory SWR at these frequencies and is
> >> tuned more to 3.8MHz.
> >>
> >> I do not know which section of the antenna to lengthen to lower the
> resonant
> >> freq on this band without affecting the other bands. If someone could
> let
> >> me know what to do I would appreciate it.
> >>
> >> Michael Hart
> >> VK2JXI
> >
> >--
> >-----------
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2233. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C38092.D3FBAA1B@oltraining.com>
Source record: 180659

Odd, my SB-220 produces 2.7 KV in the high power position.

Terry - W6LMJ

sideband wrote:

> On or about 16 Sep 2000 13:06:22 GMT, fractenna@aol.com (Fractenna),
> using the forum rec.radio.amateur.antenna did say:
> :What's with this 1 KW stuff? The best I can get IN on my SB220 on 10M is 1/2
> :amp at 1700 volts. How is that a KW OUT??
> :
> :73
> :Chip N1IR
>
> 1700volts @ 1/2 Amp is still 850 watts (I can do basic math.) Then
> assume the amp is 50% (ballpark figure here) efficient. 425 Watts,
> there. Then the db loss from the Frick&Fracktenna, and you might be
> radiating about a watt and a half. ::snicker::
>
> Just my two cents, your mileage may vary.
>
> -SSB

--

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2234. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8pvvl4ojl0@208.206.142.107>
Source record: 180660

Roy Lewallen wrote:

>. So far we've seen a whole lot of huffing, puffing, and posturing, but no

> lawsuits, let alone any which have resulted in an award of damages.

Best I'm able to determine that's all we've seen of his antennas, too.

2235. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C38033.866D6B7F@bigfoot.com>
Source record: 180661

Mak wrote:
> Resonant long wire (hopefully), earthed from the feed point near the top of
> my house.

What does "earthed" mean? Unless you supply a counterpoise at the
feedpoint, much of your RF current will flow back down the outside
of your coax.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2236. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8pvvs4ojl1@208.206.142.107>
Source record: 180662

Fractenna wrote:

> See the ham page for ham antenna info. This is non-commercial, the firm does
> not sell ham antennas.

So how and why do you fancy yourself a competitor to a firm which does???

2237. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916103150.28584.00000539@ng-cr1.aol.com>
Source record: 180663

>
>Odd, my SB-220 produces 2.7 KV in the high power position.
>
>Terry - W6LMJ
>
>sideband wrote:
>
>> On or about 16 Sep 2000 13:06:22 GMT, fractenna@aol.com (Fractenna),
>> using the forum rec.radio.amateur.antenna did say:
>> :What's with this 1 KW stuff? The best I can get IN on my SB220 on 10M is
>1/2
>> :amp at 1700 volts. How is that a KW OUT??
>> :
>> :73
>> :Chip N1IR
>>
>> 1700volts @ 1/2 Amp is still 850 watts (I can do basic math.) Then
>> assume the amp is 50% (ballpark figure here) efficient. 425 Watts,
>> there. Then the db loss from the Frick&Fracktenna, and you might be
>> radiating about a watt and a half. ::snicker::
>>
>> Just my two cents, your mileage may vary.
>>
>> -SSB
>
>--
>-----------
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>

Sigh!

Thought I'd show some of the OM's this NG waiting for 10 to open:-)(

Terry,

I get 2300 volts idle and 1700 volts on with 120volts line. If you have 240v set I bet you can get better than that.

73
Chip N1IR

2238. Re: Definition of dB

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916103311.28584.00000540@ng-cr1.aol.com>
Source record: 180664

>
>Fractenna wrote:
>
>> See the ham page for ham antenna info. This is non-commercial, the firm
>does
>> not sell ham antennas.
>
> So how and why do you fancy yourself a competitor to a firm which does???
>

We don't:-) I don't see the problem. Can you point it out?

73
Chip

2239. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <24925-39C382A4-8@storefull-112.iap.bryant.webtv.net>
Source record: 180665

Wayne Grauel wrote:
"Does this (Beverage antenna) work for transmission too---?"

The War Department`s think tank (MIT Radiation Lab) had this to say about the Beverage in 1945:
"The Beverage antenna (often) consists of a single wire, two or more wavelengths long, supported on poles at a height of 12 to 20 feet above ground.
This antenna is directional and is used primarily for either transmitting or receiving VERTICALLY polarized ground waves.
With two wavelengths of wire, an efficiency equalling that of a quarter-wave vertical can be expected in the h-f band over poor or medium soil."

Poor soil is the key to the comparison with a quarter-wave vertical. It helps the Beverage and hurts the quarter-wave vertical. The two-wavelength wire has considerable gain in the general direction of one end if terminated by a 500 or 600 ohm resistance. It has considerable gain in the direction of both ends if no terminating resistance is used. Most of this gain is dissipated by the lossy earth that is so close to the antenna, but enough remains to make the Beverage competitive with the quarter-wave vertical which has no gain over a dipole and over poor soil can itself have considerable loss, but it is not so lossy as the Beverage. So, according to the War Department, the signal transmission and reception capabilities in the directions most favored by the Beverage are the same as for the non-directional quarter-wave vertical. The Beverage`s ground loss just about offsets its directional gain so that it is equivalent to a quarter-wave vertical over lossy soil.

Best regards, Richard Harrison, KB5WZI

2240. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C38854.DC042D22@oltraining.com>
Source record: 180666

What frequency on 10 meters - 28.305 MHz?

We could have a mini shoot out. My GEM quad against - what ever...

Terry - W6LMJ

Fractenna wrote:

> >
> >Odd, my SB-220 produces 2.7 KV in the high power position.
> >
> >Terry - W6LMJ
> >
> >sideband wrote:
> >
> >> On or about 16 Sep 2000 13:06:22 GMT, fractenna@aol.com (Fractenna),
> >> using the forum rec.radio.amateur.antenna did say:
> >> :What's with this 1 KW stuff? The best I can get IN on my SB220 on 10M is
> >1/2
> >> :amp at 1700 volts. How is that a KW OUT??
> >> :
> >> :73
> >> :Chip N1IR
> >>
> >> 1700volts @ 1/2 Amp is still 850 watts (I can do basic math.) Then
> >> assume the amp is 50% (ballpark figure here) efficient. 425 Watts,
> >> there. Then the db loss from the Frick&Fracktenna, and you might be
> >> radiating about a watt and a half. ::snicker::
> >>
> >> Just my two cents, your mileage may vary.
> >>
> >> -SSB
> >>
> >--
> >-----------
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> >
>
> Sigh!
>
> Thought I'd show some of the OM's this NG waiting for 10 to open:-)(
>
> Terry,
>
> I get 2300 volts idle and 1700 volts on with 120volts line. If you have 240v
> set I bet you can get better than that.
>
> 73
> Chip N1IR

--

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2241. Re: MOBILE ANTENNA'S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C3867A.8E2DF097@bigfoot.com>
Source record: 180667

Jerry Oxendine wrote:
>
> Isn't this why Don Johnson referred to the Hamstick in his book as a
> "Dummy-load-on-a-stick"? LOL! Pretty accurate description IMHO! LOL!

Hamsticks do an OK job on the higher bands but on 75m, you can't
tell the difference between a Hamstick and a 12ft whip driven
by an SGC-230 autotuner. Ever feel of a 75m Hamstick at the top
of the coil after transmitting with 100 watts? It's almost as
hot as a 100 watt bulb.

I have posted the summary of rankings for 75m mobile antennas on
my web page based on the results of three 75m mobile shootouts.

> > Assuming the 0 dB mobile antenna is radiating ten watts,
> > the 75m Hamstick would be radiating less than one watt using
> > the same transceiver.
--
http://www.mindspring.com/~w6rca

2242. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000916105230.05791.00000148@ng-ff1.aol.com>
Source record: 180668

>Odd, my SB-220 produces 2.7 KV in the high power position.
>
>Terry - W6LMJ

Hi Terry--

What kind of power can you get out? I used to collect and sell SB220's and the best I could get, on a 240 line, was 1150 out on 40M.

On this one, which is on 120v, I can get 850 w IN, tops, on 10M.

73
Chip N1IR

2243. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:05:38 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8pudg8$4m1$1@nnrp1.deja.com>
Source record: 180619

Having worked with some Andersen Consultants I'm not certain that I'd
trust their test results...
<g>

In article <39B96DD7.ACC06433@eznec.com>,
Roy Lewallen <w7el@eznec.com> wrote:
> Peter Bertini wrote:
> >
> > The following short quiz consists of 4 questions and tells whether
you
> > are qualified to be a "professional." Scroll down for each answer.
>
> > . . .
>
> > According to Andersen Consulting Worldwide, around 90% of the
> > scientists they tested got all questions wrong. But many
> > preschoolers got several correct answers.
>
> From which the obvious conclusion is:
>
> a) Preschoolers are more professional than scientists.
> b) The test measures something other than professionalism.
>
> Take your pick.
>
> Roy Lewallen, W7EL
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2244. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 00:10:53 UTC
From: fractenna@aol.com
Message-ID: <20000915201053.11213.00000021@ng-ci1.aol.com>
Source record: 180718

>I don't think there are twenty Senior RF Antenna Engineers in the COUNTRY,
>much
>less in Phoenix. I doubt you can afford most of the ones I know who actually
>know what they are doing.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup

Heh heh!!

Sure is tempting to sell out though sometimes!:-)

Too bad not in Tucson...

73
Chip N1IR

2245. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:03:54 UTC
From: k1bqt@aol.com
Message-ID: <20000915210354.24521.00000774@ng-cc1.aol.com>
Source record: 180620

>Too bad not in Tucson...<

My son, today, shared a paper on EE engineering ethics. Not to be unkind, but sorry Charlie! Star-Kist PhD Radio Astronomers don't get to be Senior RF Engineers for major companies any more than MEd head-shrinkers do! I'll FAX you a copy of the code, if you like.

Rick K1BQT

2246. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:17:18 UTC
From: 2w8ji@contesting.com
Message-ID: <39c2c99f.56731200@news.akorn.net>
Source record: 180621

On 15 Sep 2000 22:47:18 GMT, fractenna@aol.com (Fractenna) wrote:

>Since many of those coming are on this NG, let me just welcome you ahead. Glad
>you are coming:-)

>73
>Chip N1IR

I'll be there when the doors open Chip. See ya soon! I'll bring some
math books, and some Flash cards.

73 Tom

2247. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:35:10 UTC
From: w1rfi@aol.com
Message-ID: <20000915213510.22203.00000253@ng-fl1.aol.com>
Source record: 180622

>From: bmanley bmanley@ispchannel.com

> As recent evidence, we are hearing that electromagnetic radiation correlates
> with various cancers without even understanding why.

At this time, there are only a handful of researchers making that claim; the majority of their peers do not accept their results as conclusive. Of the few studies I have perused, the scientific flaws are pretty evident, once they are pointed out.

I think that the media, not science, is responsible for most of the hype.

For a very balanced view on the subject, see:

http://www.seas.upenn.edu:8080/~kfoster/comar.htm

and

http://www.mcw.edu/gcrc/cop/cell-phone-health-FAQ/toc.html

The latter is quite comprehensive and well received in the scientific community, as a whole.

73,
Ed Hare, W1RFI

73,
Ed Hare, W1RFI

2248. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:42:24 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <4eAw5.252$tn.7677@typhoon.ne.mediaone.net>
Source record: 180623

Over the years in numerous field day set ups, a 200 - 400 ft wire
placed on the ground and used as a receiving antenna enabled many
contacts with early summer QRN that would have been otherwise impossible,
using the transmit antenna! Run the wire SW x NE, (here in the NE) making
sure you don't blow the front end of the receiver when you transmit, you
will be amazed.

Also, to get 5 - 10 dB additional signal into the receiver, use a 16:1
transformer
from the wire to the receiver input. This requires a reasonably good ground
at
the end of the wire. I've found that a single 8' ground rod is usually
sufficient.
This is for 160 to 40 meters. The 40 M performance isn't too impressive,
but most of the time
there is an advantage. This is over average soil. In one case on the
seacoast I tried this
setup and it still worked, but my feeling was that inland, the improvement
over the transmit
antenna, a dipole at 40 to 70 feet up, was greater. Resistive termination
to get F/B
does help but in field day set ups it's another complication.

On a several occasions I had a remote relay switching in a termination and
most of the time
it didn't help much. The null off the back is sharp. The Beverage Antenna
Handbook
by Victor Misek, W1WCR, contains a description of the steering wave array
which
does work very well. Check it out. It provides a steerable rear null and
does work.

BTW, a seacoast location (within 100 feet of the ocean) is always better
for any antenna!....with the possible exception of a good inland hill,
providing
200- 300 ft above average terrain elevation for 10+ wavelengths.

73,
Chuck...K1KW

2249. Re: Whats a GOOD 10-80mtr. Dipole for trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:43:23 UTC
From: w1rfi@aol.com
Message-ID: <20000915214323.22203.00000254@ng-fl1.aol.com>
Source record: 180624

>From: jeffreys@cyburban.com (Jeffrey Steinberg)

> W9INN is in Chicago area. Very (I mean very) small add in CQ and
> QST each month near the back.

You can look him up at:

http://www.arrl.org/tis/tisfind.html

If you want to be lazy...:

http://www.arrl.org/cgi-bin/tisfind?patt=w9inn

CQ and QST also have an adveritisers index that makes those small ads easier to find. :-)

73,
Ed Hare, W1RFI

2250. Re: 4 element yagi for 10 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 01:54:47 UTC
From: NT6K <nt6k@thevision.net>
Message-ID: <ank5sssc8vq5mdtbu0n8v913k1pkq5bt1h@4ax.com>
Source record: 180625

Bill,
I built a 4 element yagi using the specs from the DL Style 7 element
yagi that has been in the ARRL Antenna Book and the Handbook
for years. Just using the first four elements from that works well,
and is small enough it can be turned with a U100 rotor.
Spacing
Ref 18' 1/2"
Driv 16" 10 1/2" 5' 10 1/2" from Ref
1Dir 16' 4' 10" from Driv
2Dir 15 10 1/2" 5' 6" from 1Dir

Driven element uses a gamma match on the one I built and the
SWR curve covers from 28.025 at 1.6:1 to 28.700 at 1.7:1.
I used 1 3/8 for the boom, the two outer elements are mounted
on the top of the boom, and the two middle elements are mounted
on the bottom of the boom, this kept the elements in line with
what little boom sag there was.
good luck and have fun
Dave
nt6k@thevision.net

On Fri, 15 Sep 2000 17:30:30 -0500, "Billy Young" <youngbil@lcc.net>
wrote:

>Hello,
>I'm looking for plans to build a 4 element yagi for 10 meters. This is my
>first project and I'm looking for a simple design that won't leave with much
>guess work.
>
>"73's"
>Billy Young
>KD5CSD
>

2251. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:02:01 UTC
From: k1bqt@aol.com
Message-ID: <20000915220201.24521.00000778@ng-cc1.aol.com>
Source record: 180626

Doesn't uncorking your station at the LDS PA system at the height of their event constitute misuse of one's ham privilege with the potential intent to violate a religious sect' s civil rigths?? You've already calculated and published your ERP at 12,000 Watts (correctly or not), indicating a full understanding of your station's potential to commit harm through powerfully directed RFI. Civil rights violations implemented by a member of another faith (intentional or not) would surely take precident over FCC rules in any lawsuit or licensure hearing. Better check with your lawyer before you go for #311! I'm not kidding. If I were there, I wouldn't touch that microphone on a bet!

Rick K1BQT

2252. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:03:34 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <WxAw5.264$tn.8188@typhoon.ne.mediaone.net>
Source record: 180628

Funny, my usually well informed sources state that this activity will not be attended at all!! Must be a rather good secret! (Fracky,you have some folks close around you that really can't stand your behavior)

Please provide the open house details to this group, since you found it necessary to post to the "alleged" attendee's on this NG...

2253. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:04:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8pukdiogf1@plutonium.btinternet.com>
Source record: 180627

Roy, I can only repeat - use your own program Eznec or any later variant. Model any weird shape and size of loop you fancy.

Should you find a shape of loop having the same or smaller perimeter than a standard 1/2-wave resonant circle but with a radiating efficiency greater than the circle please let us know.

Constraints : - identical diameter copper conductors of the loop and the standard circle. The perimeter must not be greater than 1/2-wavelength. The standard circle is not a continuous loop but has a sawcut in it such that it is half-wave resonant as with a magloop without a tuning capacitor. The antenna must be remote from ground.

The loop may be tuned by inserting a (lossless) capacitor in series as with a magloop.

No restrictions in the manner in which the loop is fed but feeding arrangements need not be included in the model.

The foregoing is of course hypothetical. Because I predict an inexperienced person searching for the holy grail would give up after 4 or 5 attempts and getting nowhere. As for you Roy, you will probably never start a task which you recognise as being an obvious waste of time before you click on the start button.

It is obvious because, for example a 5-feet diameter standard circular loop, with a 2" diameter conductor, 1/2-wave resonant at 30 MHz, has a radiating efficiency of approximately 99.85 percent. Beat THAT with any other shape of conductor ! With what other shape would you start ? A square ? A fractal ?
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Roy Lewallen <w7el@eznec.com> wrote in message news:39C2A863.6552C0F1@eznec.com...
> Guess I'm being one of those nit-pickers. First, there was nothing in
> your statement (which I thought was directed largely at fractal

> antennas, some of which are closed and some not) which
restricted it to
> loops. So it wasn't apparent to me that you were
restricting the
> statement to closed loops. I also made the mistake of
taking your
> statement about conductor loss literally. A smaller loop
is "contained
> within its circular area", yet has smaller wire
resistance. Apparently
> you meant that a round loop has the smallest conductor
resistance of any
> loop containing the same area, which of course is true
from basic
> geometric considerations. It's just not what you said.
>
> About the radiation resistance claim. The only Terman book
I have is
> _Radio Engineering_, Fourth Edition, and I couldn't find
any discussion
> of small loop antennas in it, although I might have missed
it. Kraus
> devotes a whole chapter to loops in _Antennas_. In it, he
shows that a
> small circular loop and small square loop, each with
uniform current,
> have the same pattern and radiation resistance provided
they enclose the
> same area. I can't find where he applies the
generalization to any shape
> loop as you have. The requirement for this equality
between circular and
> square loops also depends on uniform current distribution,
an assumption
> which begins becoming invalid at very roughly a quarter
wave perimiter
> length. It's not hard to imagine a non-symmetrical loop
shape like, say,
> a keyhole, which doesn't have uniform current
distribution, so wouldn't
> fit the requirements (besides not being round or square).
The
> relationship between the field from this and from a
circular loop might
> depend in quite a different fashion on their enclosed
areas. So although
> circular and square loops with uniform current have the
same field
> strength and shape and same radiation resistance provided
they have the

> same area, I haven't seen any evidence that this applies
to any enclosed
> shape whatsoever. It isn't obvious to me that a fractal
antenna, even
> though it would fit within a small loop, would necessarily
have a
> uniform current distribution. But it isn't square or
circular, either,
> so I don't believe we can make the assumption that its
field will be the
> same as a circular loop enclosing the same area. If you're
aware of an
> analysis that shows that the area rule is independent of
shape, I'd
> appreciate knowing what it is so I could look it up.
>
> It's easy to forget the conditions under which well-known
rules are
> valid -- I got caught by this myself the other day.
>
> Don't interpret this as a claim that a small loop can't be
the most
> efficient antenna of its enclosed area. I just don't think
it's
> "obvious" that it is, and don't think you've demonstrated
that it is.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > Roy, is it obvious we are considering only loops, such
as
> > magloops, (which may be cut into to make a feedpoint)
which
> > enclose an area in square metres or square feet ? A
> > straight dipole encloses neither an area nor has any
volume.
> > It does not belong to the class of antennas within which
> > comparisons may be made.
> >
> > The radiation resistance of small loops, regardless of
> > shape, is proportional to the square of the area
enclosed.
> > You can use Eznec to demonstrate this. Construct a
lossless
> > square loop with the ends almost touching, say 1 mm
apart,
> > half way along one side. Cut into it and feed it
opposite

> > the almost touching ends. We have dipole bent into the
form
> > of a square. Record feedpoint resistive component vs
> > frequency and note relationship. Reducing frequency, of
> > course, is same as decreasing loop perimeter in the same
> > proportion and keeping the frequency constant, and is
much
> > more convenient to do with Eznec.
> >
> > Anyway, every elementary text book including Terman
tells
> > the same story. I thought everybody knew this.
> >
> > (The radiation pattern of a small loop isolated from
ground
> > is also very interesting).
> >
> > In the present context the radiation resistance is the
> > distributed value as is the conductor resistance. It
can, of
> > course, be transformed to any feedpoint.
> >
> > It is necessary only to show that for a given length of
> > conductor the area enclosed is a maximum, and so must be
the
> > radiation resistance, when the conductor is formed into
a
> > circle. Any other shape of the same perimeter length
must
> > have a smaller radiation resistance.
> >
> > Since the loss resistance is proportional to the length
of
> > the perimeter it follows that a full circle antenna has
the
> > greatest possible efficiency for a given conductor
diameter.
> >
> > As loop perimeter increases the radiation resistance
> > increases less rapidly. But at least up to the size of
> > 1/2-wavelength perimeter the circular shape always wins
the
> > efficiency stakes. A hexagon is hardly any differerent.
A
> > square is not far behind. A fractal-ized loop I know
not
> > its shape. But one thing for certain it cannot be so
> > efficient as the circle or square which encloses it. Or
if
> > it encloses the same area its radiation resistance will

be
> > the same but its perimeter and hence loss resistance
must be
> > greater.
> >
> > On the other hand, for a given perimeter and conductor
> > diameter there's hardly anything to choose between the
whole
> > pack of 'em in terms of dB.
> > ----
> > Reg
> > --
> > Roy wrote
> > > Reg Edwards wrote:
> > > >
> > > > Steve and Frac,
> > > >
> > > > Isn't this much ado about nothing ?
> > > >
> > > > From fundamental principles, it should be obvious a
> > circular
> > > > loop with a perimeter of 1/2-wavelength has a
radiation
> > > > resistance greater than, and a conductor resistance
less
> > > > than any shape, certainly a fractal shape, which may
be
> > > > contained within its circular area. Consequently
the
> > simple
> > > > loop has the highest efficiency of all possible
shapes
> > > > having the same length of conductor. (All antennas
> > having
> > > > the same conductor diameter). . .
> > >
> > > Neither of these is obvious to me. A dipole whose
length
> > is the less
> > > than or equal to the diameter of the loop will have a
> > smaller conductor
> > > resistance than the loop, yet it can be contained
within
> > the loop's
> > > area. And would you please be so kind as to elaborate
on
> > the reasoning
> > > that leads to the conclusion that the radiation
resistance
> > of any

> > > enclosed shape has to be less than that of the loop?
> > >
> > > Roy Lewallen, W7EL

2254. WTB: WARC Beam or Log & Linear ve3rick@aol.com

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:12:41 UTC
From: ve3lll@my-deja.com
Message-ID: <8pukuccra1@nnrp1.deja.com>
Source record: 180629

WTB: WARC Beam or Log & Linear ve3rick@aol.com

Sent via Deja.com http://www.deja.com/
Before you buy.

2255. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:30:52 UTC
From: 2w8ji@contesting.com
Message-ID: <39c2d7b4.60336941@news.akorn.net>
Source record: 180630

On Fri, 15 Sep 2000 21:01:43 -0400, Wayne Grauel
<wgvideo@attglobal.net> wrote:

>OK Tom (and group), I'm learning a lot here, ...
>
>1. What is a beverage antenna?

It was named after a fellow who worked for RCA named Beverage.
It's a simple long low longwire, usually terminated in a resistor to
make it uni-directional towards the resistor.

It has about 450-600 ohm impedance, usually. The impedance varies with
height and soil conditions, as well as wire size.

>2. In lay terms, why does it work so well to the ground

It doesn't work "well" so far as gain goes. It is a rather lossy
antenna, usually around 20 dB weaker than a full size antenna. For
receiving that isn't important, because any lack of gain can be made
up in a amplifier ahead of the receiver.

It works because the earth below the antenna is lossy, and that loss
causes a potential difference along the earth. One way to view it is
the wave "tilts" because of ground loss, so the wire "sees" that
tilted wave.

With lossless ground below the antenna, a Beverage will almost go
dead!

The long length makes it directional, and that reduces unwanted
noises.

It is a very ineffective way to get directivity, but that is offset by
the ease of construction. It is a very "forgiving" antenna, even if
you don't install it perfectly it's hard to mess it up.

>3. What effect does his resistor in the end have (if any)

It makes it more uni-directional. Even without the resistor, the
Beverage is somewhat unidirectional firing away from the feedpoint.

The resistor terminates the antenna, and reduces standing waves in the
wire. That's what makes it unidirectional. Ground losses below the
antenna make it somewhat unidirectional even without termination,
especially if the antenna is long interms of wavelength.

Once it's about two wavelengths long, you are about at the limit of
performance increase with length.

>4. Does this work for transmission too or better for just reception?

It's a poor transmitting antenna, because of earth losses.

2256. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 02:36:54 UTC
From: 2w8ji@contesting.com
Message-ID: <39c2dbaf.61355531@news.akorn.net>
Source record: 180631

On Sat, 16 Sep 2000 02:03:34 GMT, "Chuck O'Neal" <coneal@ultranet.com>
wrote:

>Funny, my usually well informed sources state that this activity will
>not be attended at all!! Must be a rather good secret! (Fracky,you
>have some folks close around you that really can't stand your behavior)
>
>Please provide the open house details to this group, since you
>found it necessary to post to the "alleged" attendee's on this NG...

Hi Chuck,

Do you thing Chunky-Chip is ever going to come to visit me like he
promised? I think he is all hot air.

73 Tom

2257. Force 12 ZR-3 Antenna Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 03:14:28 UTC
From: Jim Hahn <jimboL51@home.com>
Message-ID: <39C2E520.CFC3B3F6@home.com>
Source record: 180632

Is anyone familiar with the Force 12 ZR-3? Opinions? Thanks. Jim Hahn
in San Diego

2258. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 04:37:18 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C2F888.8A4E9566@oltraining.com>
Source record: 180633

If I was going to pick an approach to antenna design - it would have to be the arrow / target method described earlier. Very early in my amateur experience I spent a very enjoyable month, as a novice, experimenting with a vertical antenna. I was on vacation in the Finger Lakes region of New York state and had plenty of time to just "see what works." I thought the target vertical mounting point was on the front or rear of a travel trailer - but I was wrong.

I started the process by hanging a parallel dipole for 40 and 80 meters between to tall pine trees. The ends of the dipole were at about 40 feet, the apex drooped down to about 25 feet. That became my reference antenna. I also had a bread board antenna tuner that followed a design from the Handbook. Thus I could build antennas with a 1:1 match design goal, but could actually load just about anything.

Next I had an 18 foot tall vertical that was base loaded. It was a very simple vertical sold by High Gain at the time. The base loaded coil was adjusted by moving a shorting clamp from the bottom of the coil to the the top adjusting the operating frequency from 10 meters through 80 meters.

Once the dipole was setup so that it enjoyed the lowest SWR in the novice band of 80/40/15 meters I turned my attention to the vertical. My goal was to create the optimum mobile operation situation for a travel trailer. In most cases I knew that I could put up a dipole as an inverted vee. But I was hoping to achieve superior results with the vertical.

First I tried bolting it to the bumper and the tongue of the trailer. Neither location worked well. The dipole easily outperformed the vertical in all receive and transmit test. Generally the dipole out performed the vertical by several S units. Routine contacts were made with the dipole, but they were difficult with the vertical. It was such a poor performer. I was only able to load the vertical by using the antenna tuner. In all cases the vertical put a lot of RF back inside the travel trailer and the key - felt hot - to the touch when transmitting.

Then I had the bright idea of mounting the vertical to a cold water pipe that stuck up on the middle of a large grass field. Still very poor performance, though at least I was able to tune it for each band and load it with out using the antenna tuner. I then added a grounding rod to the cold water pipe - but no improvement was noted.

During the week of experimenting I counted myself luck to have an understanding wife and set of in-laws. The antenna project consumed all of my time.

In the second week of experimenting I bought a ten foot mast and tried mounting the vertical elevated at the front, back, and along either side of the trailer - things were looking up. The antenna was performing better - but the dipole

was consistently better in all cases.

It was during this phase of experimenting that bought wire and tried a counter poise for the first time. Hey - what do you want from a young Novice. The elevated vertical with counter poise was tunable and load able without the antenna tuner. But the dipole was still better. I was getting ready to accept the poor performance of the vertical as being as "good" as it gets. But I was troubled by the mounting mast having to be taken down and stored each time i moved the trailer.

I decided that what I needed was a water pipe flange bolted to the top of the trailer as a mounting point. But that would not be very strong. The trailer had a thing metal roof with about 16 inches between rafters. I settled on having a metal mounting plat fabricated and mounted permanently to the top of the trailer in the middle of the roof with the flange permanently bolted to the plate. That way I could have a 24 inch pipe screwed in to the flange and the vertical claimed to the pipe for a very rigid mounting system.

A visit to a local machine shop and a day later I had a nice plate ready to be bolted to the top of the roof of the trailer. One day after that I had it bolted to the top with the flange and vertical mounting pipe. That day I put the vertical up, started the tuning process and was very pleased and surprised to note that the vertical could be tuned to a 1:1 match on any ham frequency, on any band I cared to try.

More surprising was the signal reports. The vertical was receiving considerably better then the dipole. Actually - it was unbelievably better then the dipole. During my schedule with WA6INF at Fort Sill, who normally I could work in the evening with difficulty, was now giving me a 599 report. The vertical was now several S units better than the dipole. In fact - in some cases - vertical to vertical - the vertical was able to achieve an S9 + 10 to 20 db on receive, while the vertical was barely able to detect the presence of the signal.

The target ended up being a mounting point in the middle of the trailers metal roof with a low resistance ground path. A great summer vacation. Great radio fun, and I had many years of the vertical on the trailer roof being the best antenna I owned.

Terry - W6LMJ

"Ed Hare, W1RFI" wrote:

> rattlehead@my-deja.com wrote:
>
> > so my question is this: I KNOW that the verticals can't perform as well
> > as the dipoles and V's on HF, but do they work well enough to give them
> > a try? or should I just bite the bullet and put up a dipole or V and
> > just use a tuner to solve the SWR problems?
>
> If you follow the history of this thread, you can get back to the reports
> that his verticals, with an excellent radial system over what he believes
> would be poor ground, seem to perform a bit better than his dipole at >300

> feet above ground, on 1.8 MHz.
>
> If you can get a horizontally polarized antenna up about a half-wave, it
> will be a pretty decent DX antenna. But don't discount that vertical,
> especially if you are over a good ground (pastoral farmland, for example).
> And the bottom line is that, for some, they simply don't have the real
> estate or height to put up an effective antenna, so going vertical and
> improving the ground connection as much as possible may be the only
> practical alternative. For DX, I would definately choose a vertical, even
> with a poor ground, over a low horizontal antenna for DX. On the lower
> bands, ie 80M, a low horizontal antenna will be better for communications of
> a few hundred miles most of the time.
>
> 73,
> Ed Hare, W1RFI

--

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2259. Re: W8NX Trap Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-16 13:30:57 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <39c377db@turakina.six.asn.au>
Source record: 180527

Thanks Terry,

There are THREE wires beyond the 40m trap. They are a 4.9foot section then a 6foot branch (capactive load it is called) then a 16.1foot section. My initial guess was to lengthen the 16.1' section [by how much I don't know] but it seems you are suggesting to lengthen the 4.9' section. I would have thought this would also affect the other HF bands then.... Can you confirm this is the right section to lengthen please.

rgds.

Michael

Terry Redding wrote in message <39C36FD6.1A2DBF8E@oltraining.com>...
>Lengthen the wire on the end of the dipole - just beyond the 40 meter traps.
>
>Terry - W6LMJ
>
>Michael Hart wrote:
>
>> I am interested in making a trap dipole as described by W8NX in August 1994
>> QST. I need to build the 80, 40, 20, 15 & 10 metre version.
>>
>> My trouble is that in Australia the section of the 80 metre band that is
>> predominately used is between 3.5 and 3.7MHz (centreing around 3.6MHz). The
>> antenna described has an unsatisfactory SWR at these frequencies and is
>> tuned more to 3.8MHz.
>>
>> I do not know which section of the antenna to lengthen to lower the resonant
>> freq on this band without affecting the other bands. If someone could let
>> me know what to do I would appreciate it.
>>
>> Michael Hart
>> VK2JXI
>
>--
>-----------
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>

2260. Re: FracTriad I tried to build one but have a few questions?? HI HI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917163241.07253.00000391@ng-fy1.aol.com>
Source record: 180469

>Really!!! I tried real hard but just could not get one of your designs to
>perform the way you describe.

That web page is filled with flawed data and incorrect interpretation.

I do not recommend that amateurs use that page.

Nathan Cohen,Ph.D.

2261. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917163509.07253.00000393@ng-fy1.aol.com>
Source record: 180470

>>From: klocko@toad.net
>
>>> 99.999% of 'arbitrarily chosen' random fractal designs cannot acheive
>>resonance
>>> nor the field strength of MI2 in it's form factor.
>>
>>Nice SWAG. Absolutely meaningless number, however, unless you've
>>actually examined a huge number of different designs.
>
>Actually, I think that examining 10 random designs would let one say that 90%
>of randomly chosen designs will not be resonant.
>
>Besides, one could say that 90% of randomly chosen lengths of doublet are not
>resonant on a particular frequency, too, especially if one did not define the
>limits of "resonance."
>
>73,
>Ed Hare, W1RFI
>

Tell you what Ed--

I will send you every single e-mail, post, and so on that I originate and you can edit . How's that?

If not, don't act like such a wise &&&.

NC

2262. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39C51E20.D33C3C0D@berkshire.net>
Source record: 180471

PLEASE ACCEPT THE OFFER!

Fractenna wrote:
>
> >>From: klocko@toad.net
> >
> >>> 99.999% of 'arbitrarily chosen' random fractal designs cannot acheive
> >>resonance
> >>> nor the field strength of MI2 in it's form factor.
> >>
> >>Nice SWAG. Absolutely meaningless number, however, unless you've
> >>actually examined a huge number of different designs.
> >
> >Actually, I think that examining 10 random designs would let one say that 90%
> >of randomly chosen designs will not be resonant.
> >
> >Besides, one could say that 90% of randomly chosen lengths of doublet are not
> >resonant on a particular frequency, too, especially if one did not define the
> >limits of "resonance."
> >
> >73,
> >Ed Hare, W1RFI
> >
>
> Tell you what Ed--
>
> I will send you every single e-mail, post, and so on that I originate and you
> can edit . How's that?
>
> If not, don't act like such a wise &&&.
>
> NC

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

2263. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917163852.07253.00000396@ng-fy1.aol.com>
Source record: 180472

>>Please show us explictly;<
>
>And step in a troll hole?
>
>Rick K1BQT
>

Not at all;

One of my main areas of research is SETI. I have done SETI for over a generation and published extensively in it. In the last few years I have published and presented several fundamental papers which now, and for generations, will be among the guidelines for how SETI should be done and how it can succeed.

A KEY aspect of this is EIRP. Thus if I am incapable or incompetent in this regard, I, and many others, need to know NOW before any damage is done.

So, no troll: show me how my estimate of EIRP from N1IR on 10M with my Sb220 and 10M FQY is flawed.

Your humble servant,

Chip N1IR

2264. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3aih$qc2$1@slb1.atl.mindspring.net>
Source record: 180473

Oh, oh... another Ph.D.

The NG is goin straight to hxxx

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message
news:39C109D9.787DEAAB@oltraining.com...
> I am considering building a single element quad antenna. The plane is
> to hang it like an inverted vee from the yard arm off the side of the
> tower and feed it with a 1:1 balun at the apex of the high point.
>
> I am guessing that it will out perform my current inverted vee, have a
> strong horizontal component of radiation, and be a fairly quiet antenna
> to listen on.
>
> I wonder, has anyone on in the newsgroup put up a single element quad
> and compared it to an inverted vee?
>
> All responses appreciated.
>
> Terry
>
> --
> -----------
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>

2265. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <cqbasssrnmho8gaispk8cactb2n65nd6nd@4ax.com>
Source record: 180474

Yep.. a Ph.D. who isn't smart enough to figure out how to configure
his news client NOT to both post and email on replies.

Piled Higher and Deeper.

-SSB

On or about Sun, 17 Sep 2000 16:39:49 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com>, using the forum rec.radio.amateur.antenna did
say:

:Oh, oh... another Ph.D.
:
:The NG is goin straight to hxxx
:
: Peter K1PO
:
:--
:Peter O. Brackett
:Morrisville, NC

2266. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3b3l$29m$1@slb6.atl.mindspring.net>
Source record: 180475

Gary:

Yep... you'r correct, it was/is not WSB it is in fact the TBS transmitter.

That's the one I stared at every day and wondered if I was slowly going
sterile or whatever... WTBS.

My office was on the 41 floor of the BellSouth tower overlooking mid-town
and looking at about mid-point on the TBS tower.

So Gary, what exactly was the ERP at my desk only 8 blocks away on the 41st
floor of the BellSouth tower?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Gary Coffman <ke4zv@bellsouth.net> wrote in message
news:mcm7ssgqvtavto1fgiit2isg0ckko392v3@4ax.com...
>
> The only midtown broadcaster is WTBS, with transmitter and tower located
> at 1018 West Peachtree. The tower is 1040 feet AGL, and the ERP is 5 MW
> (peak) on channel 17. The roof of the Bell South tower is 618 feet AGL,
well
> below the main lobe, and is 8 blocks away.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

2267. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3bbf$t22$1@nntp9.atl.mindspring.net>
Source record: 180476

Reg:

Surely you are not a second in the fractal corner!

How would you characterize yourself, are you just a ringside spectator, or
an active iconoclast?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:8q2us8krj3@uranium.btinternet.com...
> I cannot let the present stage of the fractal deer-baiting
> saga pass by without saying how much I have admired the
> great courage, ingenuity and enormous persistence displayed
> for several years by Fractenna, the solitary, isolated,
> Bambi ?) deer, in the face of what must have been the most
> prolonged and vicious attacks, from a more tormenting,
> slavering pack of wolves, smelling blood, sheltering behind
> numbers, than in any other campaign since the Internet
> began.
>
> If any of you crowd of bullies should think Frac has been
> mortally wounded, think again. He's hardly been scratched.
> He's stronger because of it. You'd better retire to your
> corners, lick your wounds and nurse your guilty consciences.
> Either change tactics or the subject.
>
> Boiiiiinnnngg ! - Seconds out !
> --
> Reg, G4FGQ
> --
>
> Peter O. Brackett wrote -
> > Many have done that simple calculation long ago.
> >
> > But then... just dismissing fractal electromagnetics as
> just some
> > overwraught pompus posturing over superficial minor
> modifications of
> > existing antenna structures, and relegating the fractenna
> postings to the

> > delete file would have deprived the serious NG reader of
> hours of fun,
> > comedy, excitement, and humor.
> >
> > Where else can one observe an Ivy League Ph.D. squirming
> and fuming in such
> > a delightful fashion and feel guilt free? Such behavior
> would not be
> > tolerated at a Ph.D. thesis defense!
> >
> > For many NGparticipants here the fractanal antics seems
> like a vicarious
> > participation in the ancient and inhuman Roman "bear
> baiting"
> > sport/amusement and without the guilt arising from baiting
> a poor caged dumb
> > animal.
> >
> > Here the "animal" has a Ph.D. and seeks to be baited.
> Simply for the
> > pleasure of the NG participants.
> >
> > Reg, would you really seek to end this "punch and judy"
> show?
> >
> > Other than futile threatening gestures from the "bear" and
> largely phony
> > threats from mercenary and possibly imaginary legal firms
> there is really no
> > RSPCA to protect the bear and remove the NG participants
> "fun".
> >
> > I for one would hate to see dear Dr. Chip, Ph.D. N1IR, NC,
> C++, Nathan
> > Cohen, CTO, etc.... depart this NG.
> >
> > For... without his sitcom antics, this NG would be but a
> pale imitation of
> > it's current delightful incarnation.
> >
> > And there would be no place for the world to learn "the
> truth" about fractal
> > electromagnetics!
> >
> > Thoughts, comments,
> >
> > Peter K1PO
> >
> > --
> > Peter O. Brackett

> > Morrisville, NC
> > --
> > Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
> > news:8pu1dj$ga8$1@plutonium.btinternet.com...
> > > Steve, does that mean we've come to the end of Fractals
> on
> > > this newsgroup ? How sad.
> > >
> > > And couldn't the same conclusion have been reached a
> couple
> > > of years back within 30 seconds and a few mental
> > > calculations ?
> > > ---
> > > --
> > > Regards from Reg, G4FGQ
> > > http://www.btinternet.com/~g4fgq.regp
> > > --
> > > Steve concluded -
> > >
> > > > Although certainly interesting, the Fractal nature of
> the
> > > antenna
> > > > geometry is not the significant factor in determining
> the
> > > antenna
> > > > performance.
> > >
> > >
> > >
> > >
> >
> >
>
>

2268. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3bra$5cb$1@slb7.atl.mindspring.net>
Source record: 180477

Well...

I don't know how dry they were...

But I have personally run 100 - 200 watts into ladder line fed dipoles just laying over the tops of trees with no insulation. I literally just threw the antennas up and over the tree tops.

I did this on field day operations on several occasions and on other "operations" often just for a few days of hamming at a temporary or transient location and while the weather was warm and dry with no ill effects that I could observe on either the transmitter, antenna or the trees.

I wouldn't consider it for a "permanent" installation and I'd be careful that humans and animals didn't come in contact with the bare wires, but it worked for me, and probably will again.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Bill Turner <w7ti@jps.net> wrote in message
news:ejq1ss4bgsul5pejprja9irlv1aaqghs79@4ax.com...
> On 13 Sep 2000 20:19:25 GMT, Boatanchor Bob NA4G
> <na4g@weedcon3.cropsci.ncsu.edu> wrote:
>
> >Bill Turner <w7ti@jps.net> wrote:
> >> You really need to figure out a way to insulate it from the trees.
> >> Even small amounts of power can generate large amounts of voltage at
> >> certain points along the wire - enough to start a fire on a dry day.
> >
> >Bill, do you have any additional information on this?
> >
> >Bob/NA4G
> >
> ----------
>
> Only two things:
>
> 1. Fires have been reported on various newsgroups in recent years. I
> personally have never had one.
>
> 2. I have observed the voltage present at the ends of antennas by

> (carefully) drawing an arc. At the 100 watt level, arcs of 1/4 to 1/2
> inch are easily drawn. That is more than enough to start a fire in a
> dry tree.
>
> 73, Bill W7TI

2269. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39C52593.A5ACDDE7@berkshire.net>
Source record: 180478

generally a loop with its top at the same height as an inverted v will perform worse than the inverted v(though only by a little bit). this combined with having double the wire in the air and the associated problems with ground and other obstruction clearance generally makes it better to run a plain inverted v over a loop. after modeling several loops and v's for installation here it is fairly obvious that this is because almost half the loop's radiation comes from the very bottom, closest to the ground and anything else that is in the way.

> Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message
> news:39C109D9.787DEAAB@oltraining.com...
> > I am considering building a single element quad antenna. The plane is
> > to hang it like an inverted vee from the yard arm off the side of the
> > tower and feed it with a 1:1 balun at the apex of the high point.
> >
> > I am guessing that it will out perform my current inverted vee, have a
> > strong horizontal component of radiation, and be a fairly quiet antenna
> > to listen on.
> >
> > I wonder, has anyone on in the newsgroup put up a single element quad
> > and compared it to an inverted vee?
> >
> > All responses appreciated.

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

2270. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3c77dpb1@nntp9.atl.mindspring.net>
Source record: 180479

Roy:

Apparently only Ph.D.'s and such are impressed by DXCC.

Any certificate will impress a Ph.D.... they are certificate obsessed.

Now some just perfect antennas and design equipment and don't need a fancy certifiicate to prove they can talk fast.

Ph.D., bah... obsessive test takers and certificate hunters, not confident in their own abilities they seek afirmation in sheets of parchment with fancy lacework on the borders.

Thoughts, comments?

Peter K1PO
--
Peter O. Brackett
Morrisville, NC
--
Roy Lewallen <w7el@eznec.com> wrote in message
news:39C1980D.70903BE9@eznec.com...
> A number of years ago, Randy Rand, AA2U was inducted into QRP ARCI's QRP
> Hall of Fame. As I recall, he had worked over 300 countries while
> running QRP (as defined as 5 watts maximum output on CW, 10 watts PEP
> sideband). This was well before anyone in the amateur community had
> heard of fractal antennas, so I'm sure one wasn't among the antennas he
> used.
>
> I'm afraid I'm not very impressed by how many countries a person on the
> East Coast running a kW can rack up, and it sounds like a number of
> other folks aren't either.
>
> Roy Lewallen, W7EL
>
> Chuck O'Neal wrote:
> >
> > DXCC has NOTHING to do with antenna performance...
> > so let's not be fooled by more obfuscation...
> >
> > For example, I have NO DXCC rating at all, and I am at least 20 dB
> > louder than N1IR....anywhere...running 1 KW...
> >
> > The guy that had the highest DXCC # ran only dipoles and 100 W...,
> > a W1...anyone know who that was???

2271. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <24186-39C53053-3@storefull-111.iap.bryant.webtv.net>
Source record: 180480

Tom, W8JI wrote:
"They (Beverage antennas) don`t model that way, (and) they don`t work that way."

Oh well, garbage in, garbage out.

I speak from experience using a Beverage antenna for years in Lisbon, Portugal to listen to W.R. Murrow give the evening news broadcast from WCBS, 50 KW non-directional on 880 KHz in NYC. It was dependable but subject to some fades which were conveniently solved by rocking the tuning down to 870 KHz to pick up WWL in New Orleans, Louisiana which simulcast the Murrow broadcasts with WCBS. WWL uses an East-West directional array with 50 KW and though 2100 miles from Lisbon vs. the 1600 miles between Lisbon and New York, the signal strengths were normally about the same.

I used the FCC formulas to see what signals I should expect in Lisbon. It turns out that this is an intensity of about 0.85 mv/m at 1600 miles. John Cunningham shows how to do this in "The Complete Broadcast Antenna Handbook."

Were the Beverage as bad as Tom makes out, it would not have produced the satisfactory results I enjoyed.

If Tom`s Beverage antennas don`t perform so well, maybe they are not 12 to 20 feet above ground. Maybe his ground conductivity is too high for the necessary wave tilt. Maybe Tom`s Beverages aren`t 2 wavelengths long. I don`t know what Tom and his acquaintances are doing wrong, but if you don`t need top performance it doesn`t make any difference.

Best regards, Richard Harrison, KB5WZI

2272. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q3ciu$km6$1@slb7.atl.mindspring.net>
Source record: 180481

Terry:

You've got a Ph.D. and never heard of a fractal antenna?

Disgusting! Chip will soon fix that!

Terry... get with Dr. Cohen for a few emails and he'll bring you up to speed, even perhaps certify you with a fractal certificate.

In case you don't know the certificate looks great framed beside your Ph.D. diploma. It's a modified certificate that's made from a DXCC certificate embossed with a seal from the Fractal Antennas corporate seal. Of course you will have to send Chip a notarized statement that you worked DXCC in no less than 30 minutes to get one of these awards.

Enjoy...

:-}

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message news:39C1390C.11A422DB@oltraining.com...
> I just worked my first fractal antenna - a ham in Portland, Oregon.
> Until today I had never heard of one.
>
> Terry - W6LMJ
>
> Fractenna wrote:
>
> > Fun!
> >
> > Just worked country 310 on 10M with the 10M fractal quad yagi (see:
> >
> > http://www.fractenna.com/ham/hampage1.html
> >
> > 8Q7XX, first call!
> >
> > 73,
> > Chip N1IR
>
> --
> -----------

> Terrence R. Redding, Ph.D. | over 90 Computer Courses
> President/CEO | GED Courses
> OnLine Training, Inc. | Insurance Agent Licensing
> | Internet Services
> http://www.oltraining.com | Web Broadcasting
> | Web Site Design
> (561) 357-0841 voice | Training Development
> (561) 357-0842 FAX | Keynote Speaker
> | SDL and Educational Research
>
>

2273. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c53be1.43604071@news.akorn.net>
Source record: 180482

On Sun, 17 Sep 2000 15:57:55 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Oh well, garbage in, garbage out.

I agree Richard. The War Department is famous for that!

>I speak from experience using a Beverage antenna for years in Lisbon,

I've used Beverages since around 1970, and have spent thousands of hours listenting to them. I have over 30 Beverages right now.

I also associate with dozens of people who use Beverages, and there have been may articles written.

All agree, the Beverage is nowhere near as sensitive on receiving as a 1/4 wl vertical over any kind of soil.

>Were the Beverage as bad as Tom makes out, it would not have produced
>the satisfactory results I enjoyed.

Nonsense.

Everyone who uses a Beverage understands they have negative gain.

Negative gain has nothing to do with S/N ratio on receiving, because the noise floor on HF is established by external noise propagated to the antenna. Even if a receive system has -20 dBi gain below 15 or 20 MHz, it will limit on external noise.

Once that happens, gain becomes unimportant. Directivity is the only thing that matters.

Toi make my Beverages have the same signal level as my transmitting antennas, I have to amplify the Beverages ~10 dB and pad my transmitting antennas about the same amount.

If Beverages had anywhere near the FS of a 1/4 wl vertical, people would be using them for transmitting. The radiation resistance of a Beverage is under one ohm, the loss resistances are over 400 ohms.

>If Tom`s Beverage antennas don`t perform so well, maybe they are not 12
>to 20 feet above ground. Maybe his ground conductivity is too high for
>the necessary wave tilt. Maybe Tom`s Beverages aren`t 2 wavelengths
>long. I don`t know what Tom and his acquaintances are doing wrong, but
>if you don`t need top performance it doesn`t make any difference.

My acquaintances number well in the 100's that are "doing something wrong" and span a time frame of 30 years. First, that height is too

high for 160 meters and up. At that height the Beverage would start to take on the properties of a low longwire, and radiation from the vertical drops on the ends would become a problem. Directivity would suffer.

Ten feet is about the limit on 160 meters, and progressively less hight as frequency is increased.

I suggest you get a few modern texts on Beverages, build some, or model them on a modeling program. Read ON4UN's Low Band DXing book, or any number of other texts. Relying on one source, especially a Military publication from many years ago (and especially when dozens of other sources conflict with that data), can get you in trouble.

73 Tom

2274. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q3gam$5c7$1@iac5.navix.net>
Source record: 180483

I believe you are referring to Edward R. Murrow. Not sure where the W came
from.
--

Fred W4JLE
http://w4jle.com/

> I speak from experience using a Beverage antenna for years in Lisbon,
> Portugal to listen to W.R. Murrow give the evening news broadcast from

2275. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c54369.45532353@news.akorn.net>
Source record: 180484

On 17 Sep 2000 20:30:52 GMT, fractenna@aol.com (Fractenna) wrote:

>>>Odd, my SB-220 produces 2.7 KV in the high power position.
>>Perhaps he used 10log(V) to calculate the voltage. :-)
>>73,
>>Ed Hare, W1RFI
>
>For a linear scale??
>NC

The SB-220 will run as much on 120 volts as on 240 with modern up to code house wiring.

That amp runs 2kW or so peak input. It's quite possible to get over 1000 watts PEP output on ten meters.

Of course someone could have assembled the kit improperly, maybe bending the tank wires around in zig zags or using long leads on the grids or in the input circuits. Did you put in a fractal tank coil?

With 400 mA on the meter during voice peaks you should easily be in the kilowatt PEP output range with normal voice SSB transmissions.

73 Tom

2276. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c54574.46055101@news.akorn.net>
Source record: 180485

>Fractenna wrote:
>> Oh, can you explain that to the headhunters please? I'm getting tired of the
>> phone calls, especially as I already have a position they can't match, let
>> alone beat!

You position as CTO of Fractenna, Inc is immediately over Phil's
position, isn't it? Two employees?

73 Tom

2277. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917185614.08301.00001190@ng-mf1.aol.com>
Source record: 180486

STILL looking for honest answers on how much others get out of the Sb220 on 10M...

I check with NZ1W, and back when we used a couple of SB220's at his QTH (one as backup) we could get about 600w out on 120V and 730w out on 240V.--this on 10M That was after tweaking the coils; putting in 3500Z's etc.

Anyone else ha\ve some actual numbers?

Thanks!

73
Chip N1IR

2278. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000917185804.18778.00000319@ng-ff1.aol.com>
Source record: 180487

>You position as CTO of Fractenna, Inc is immediately over Phil's position, isn't it? Two employees?<

According to the Army grant information, one of those is female.

Rick K1BQT

2279. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39C54E95.D1DE2B48@fgi.net>
Source record: 180488

1KW on 10 metres? It used to be considered bad form
in the olde days and evidence of a poor antenna.
I suppose now you use power to be heard and a
cell phone for your report, in fratured English of course
Art KB9MZ

Tom W8JI wrote:

> On 17 Sep 2000 20:30:52 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >>>Odd, my SB-220 produces 2.7 KV in the high power position.
> >>Perhaps he used 10log(V) to calculate the voltage. :-)
> >>73,
> >>Ed Hare, W1RFI
> >
> >For a linear scale??
> >NC
>
> The SB-220 will run as much on 120 volts as on 240 with modern up to
> code house wiring.
>
> That amp runs 2kW or so peak input. It's quite possible to get over
> 1000 watts PEP output on ten meters.
>
> Of course someone could have assembled the kit improperly, maybe
> bending the tank wires around in zig zags or using long leads on the
> grids or in the input circuits. Did you put in a fractal tank coil?
>
> With 400 mA on the meter during voice peaks you should easily be in
> the kilowatt PEP output range with normal voice SSB transmissions.
>
> 73 Tom

2280. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917190017.08276.00001639@ng-mf1.aol.com>
Source record: 180489

>putting in 3500Z's etc.
>

that's NEW 3-500 Z's! Sri!

73
Chip N1IR

2281. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8q3h4i$29j9$1@heap.juniper.net>
Source record: 180490

W4JLE <w4jle@alltel.net> wrote:
>Anything that create an RF point source (Read isotropic radiator) is
>marketing to the wrong crowd. I know a lot of bucks have been spent to try
>to approximate an isotropic source. My guess is that the moving parts must
>be oiled daily with snakeoil.
[...]
>> www.c2i2.com/~lasono/dovetron/main.shtml

They have a very odd definition of "isotropic", because they also say:

HALF OF THE RF RADIATES BELOW 45 DEGREES AND PRODUCES BOTH
THE LOW-ANGLE, LONG- HAUL "DX" SKYWAVE VIA F2 AND THE
SHORTER-HAUL E-LAYER "SHORT-SKIP".

THE OTHER HALF RADIATES ABOVE 45 DEGREES AND IS THE
NEAR-VERTICAL-INCIDENCE SKYWAVE (NVIS). IT PRODUCES COVERAGE OF
THE CLOSE-IN 250 MILE RADIUS AREA. UNLIKE LINE-OF-SIGHT SIGNALS
(MF/HF/VHF GROUNDWAVE), THE NVIS WILL REFLECT DOWN INTO VALLEYS
AND CANYONS, BETWEEN BUILDINGS AND BEYOND THE HORIZONS.

70% of the area of a hemisphere is below 45 degrees, while 30% is
above 45 degrees. If the pattern has equal power radiated above
and below 45 degrees then the average power density above 45 degrees
is 3.8 dB higher than it is below 45 degrees. This doesn't sound
very isotropic.

Dennis Ferguson

2282. Rectification in Alarm System speakers from Beam Antenna--help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39c553ed$0$1343$45beb828@newscene.com>
Source record: 180491

My friend, K2ACB installed a Hexbeam antenna on his roof (4.5 foot tripod mounted). With his vertical in the back-yard (about 30 feet from the house) everything is ok.

With the Hexbeam on (its about 10 feet from the second floor), he gets really bad rectification of his signal in the alarm system speakers.

I installed a whole mess of RF chokes on all of the leads coming into the alarm system computer in his basement. I did the same thing at the first floor speaker, but the rectification is still there and quite loud.

All wire is unfortunately unshielded and there is quiet a bit of it to each sensor (one is a montion sensor less than 10 feet from the Hexbeam).

Our temporary solution was to discount the speakers (all they do is announce "You have entered a secure area" (annoying) and the equally annoying whoop-whoop alarm sound (doesn't one just need to have the police notified?).

But, does anyone have any more suggestions?

--Jeffrey STeinberg, KC2GUC

2283. Re: FracTriad I tried to build one but have a few questions?? HI HI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <mFLFOYEYoiASqUQcw1yT+zcXwlWw@4ax.com>
Source record: 180492

On Sun, 17 Sep 2000 18:02:28 GMT, "Larry Naumann" <n0sa@earthlink.net> wrote:

>Really!!! I tried real hard but just could not get one of your designs to
>perform the way you describe. Is it me or is your data somehow flawed?
>Seeing as you are such a wise person and probably a professor, it must be
>that I am stupid!! I will keep trying as I beleive every word you write.
>Keep us posted on this new and exciting area of antenna design.
>Larry N0SA
>PS: I love your humor!!!!

Hi Larry,

Which one? (If it was only one, I'd be surprised!)

Actually, you may wish to heed other's advice about my bad data, it does conform fully to other published data on fractals (and that in itself should be condemnation enough).

73's
Richard Clark, KB7QHC

2284. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C55838.4F7CB35E@bigfoot.com>
Source record: 180493

Michael Hart wrote:
> However the Windom antenna on the www page I gave is feed directly from coax
> through a 4:1 balun. It soes seem to have SWR problems on 15m.

Technically, that's not a Windom. It's simply an off-center fed dipole.
Off-center fed dipoles have vertically polarized radiation from the feedline
and horizontal radiation lobes that is strongest off the long end of
the antenna. Depending upon what is desired, that radiation pattern may or
may not be better than a simple dipole.

> Since the guy on the www page I looked at has actually built one fed by coax
> and measured the SWR on each band I am happy to take his [measured] results
> as fact. The thrust of my question was along the line of radiation
> efficiency.

The feedline on an off-center fed dipole radiates because the currents
are not balanced. Otherwise, it is a wire and is approximately as efficient
as center-fed wires of the same length. Don't put too much faith in the
SWR figures. Loss in the coax lowers the SWR.

The All-HF-Band antenna on my web page is less expensive and more efficient
than an off-center coax fed dipole.
--
http://www.mindspring.com/~w6rca

2285. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <nOdx5.10154$0y5.494193@nntp3.onemain.com>
Source record: 180494

I wonder if he perchance wired the primary for 220, and is only sticking in
110? Hmmm...

de Jerry

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39c54369.45532353@news.akorn.net...
> On 17 Sep 2000 20:30:52 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >>>Odd, my SB-220 produces 2.7 KV in the high power position.
> >>Perhaps he used 10log(V) to calculate the voltage. :-)
> >>73,
> >>Ed Hare, W1RFI
> >
> >For a linear scale??
> >NC
>
> The SB-220 will run as much on 120 volts as on 240 with modern up to
> code house wiring.
>
> That amp runs 2kW or so peak input. It's quite possible to get over
> 1000 watts PEP output on ten meters.
>
> Of course someone could have assembled the kit improperly, maybe
> bending the tank wires around in zig zags or using long leads on the
> grids or in the input circuits. Did you put in a fractal tank coil?
>
> With 400 mA on the meter during voice peaks you should easily be in
> the kilowatt PEP output range with normal voice SSB transmissions.
>
> 73 Tom

2286. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3208-39C57B79-21@storefull-113.iap.bryant.webtv.net>
Source record: 180495

Fred, W4JLE wrote:
"I believe you are referring to Edward R. Murrow. Not sure where the W came from."

Fred is exactly right. I don`t know where the W came from either. I remember the closing line as: "Listen to Murrow tomorrow."

Ed was probably as good as there ever was. I remember his vivid word pictures from London during the WW-2 air war over Britain.

After CBS, Ed was appointed to head the U.S. State Department`s "U.S. Information Agency" which operated "The International Broadcast Division", better known as "The Voice of America".

Best regards, Richard Harrison, KB5WZI

2287. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q42stomu1@slb1.atl.mindspring.net>
Source record: 180496

Reg:

My friend I humbly appologize if I am guilty of lumping you in with the rest of the character assasains on this NG.

IMHO you are a very "classy" NG participant and I note here that from my own observations, you usually refrain from being "trolled" into personal attacks, etc...

A minor slip once in a while is forgiveable, since trolling is so seductive, and so...

please remember you are never my "enemy", sometimes perhaps I may think of you as being in the "loyal opposition" but never with the enemy.

Meanwhile, for myself, I'll go back to learning from the wise and knowledgeable postings from the many participants who make constructive contributions to this NG.

And I promise to try not to become too personal when commenting on a posting that is clearly braggadigio and meant to obfuscate, confuse, and create mis-information.

Regards,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:8q3mftciv1@uranium.btinternet.com...
> Dear Peter, I'm afraid your sort of reaction is a common
> occurrence - if I'm not wholely with you then I must be
> your enemy.
>
> People should be more certain of their motives - after
> experiencing disappointment in one direction they should try
> not to vent their aggression on the next imaginary victim
> who exposes himself. (Now THERE's an opportunity for
> sex-deprived contributors.)
>
> I am not anybody's second. Neither am I a character
> assassin. I try to give credit where credit is due. And I
> may be an iconoclast when pompous icons are concerned.
> Technical icons.

>
> But most times I just let things pass when they become
> personal. It was probably a mistake responding to your
> suggestion and question.
> --
> --
> Regards from Reg, G4FGQ
> http://www.btinternet.com/~g4fgq.regp
> --
> Peter O. Brackett wrote -
> > Reg:
> >
> > Surely you are not a second in the fractal corner!
> >
> > How would you characterize yourself, are you just a
> ringside spectator, or
> > an active iconoclast?
>
>
>

2288. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q447n$q4o$1@slb3.atl.mindspring.net>
Source record: 180497

William:

Well no I don't think the Ivy League admissions clerk would accept BU into that distinctive category....

As far as I can determine from Dr. Cohen's postings and from some independent research [I once checked out the title and abstract of Dr. Cohen's Cornell disertation at University Microfilms in Ann Arbor.] I believe Dr. Cohen to be a graduate of Cornell and not of BU. I assume that, although closer to the pine tree line than the ivy carperted forests further South, Cornell is an acceptable representative of the club of Ivy League schools.

Dr. Cohen does claim, in some postings to this NG, to teach at BU. This claim in and of itself is certainly not a comment on the value of BU or of its' programs.

I don't know in what capacity Dr. Cohen teaches at BU... perhaps, Teaching Assistant, Lecturer, Assistant Prof, Associate Prof, Prof, Adjunct Prof, Emeritus Prof, Dean, President, etc... could be any of those... who knows, who cares...

Dr. Cohen is apparently not a terribly effective teacher as evidenced by the reactions of the "students" on this NG and since I have never observed "golden apples" being handed out here by his students or former students I have serious personal doubts as to his suitability to teaching. Perhaps he receives kudos for his teaching abilities in another forum, certainly not here!

In my experience, here on the NG, I have never noted Cornell to officially make a posting on this or any other topic discussed on this NG.

And so, although he takes great pains to inform all and sundry hereon of the fact that he is a Ph.D. graduate of Cornell,... Dr. Cohen's posting behavior here is apparently neither condoned nor approved by Cornell.

All of our institutions of higher learning are under considerable pressure to perform these days and so I would not be so presumptious as to tell them who to hire as teachers.

Peter [Not an Ivy League graduate] K1PO

--
Peter O. Brackett
Morrisville, NC
--
william ewald <wgewald@att.net> wrote in message

news:n0qassogsclr2hamp3tjtkfpb330m871tm@4ax.com...
> On Sun, 17 Sep 2000 11:58:19 -0400, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
>
>
> >Where else can one observe an Ivy League Ph.D. squirming
> >
> >Thoughts, comments,
> >
> > Peter K1PO
> >
>
> BU is ivy league?
>
>

2289. Re: Help!! Wire in the trees

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C59B5A.8FD85402@oio.net>
Source record: 180498

Bill Turner wrote:
>
> On 13 Sep 2000 20:19:25 GMT, Boatanchor Bob NA4G
> <na4g@weedcon3.cropsci.ncsu.edu> wrote:
>
> >Bill Turner <w7ti@jps.net> wrote:
> >> You really need to figure out a way to insulate it from the trees.
> >> Even small amounts of power can generate large amounts of voltage at
> >> certain points along the wire - enough to start a fire on a dry day.
> >
> >Bill, do you have any additional information on this?
> >
> >Bob/NA4G
> >
> ____
>
> Only two things:
>
> 1. Fires have been reported on various newsgroups in recent years. I
> personally have never had one.
>
> 2. I have observed the voltage present at the ends of antennas by
> (carefully) drawing an arc. At the 100 watt level, arcs of 1/4 to 1/2
> inch are easily drawn. That is more than enough to start a fire in a
> dry tree.
>
> 73, Bill W7TI

For what it's worth, I worked in the fire service for over 20
years.
In that time I never saw a tree fire caused by RF. Being interested
in the subject, I've checked national reports for over a 10 year
period,
no tree fires due to RF. I've also used antennas running through
trees
for a number of years, power varying from 100 to over 2000 watts. No
tree fires yet.
There's always the possibility, but I just don't think I'd worry
about it too much. Probably more likely to be hit with a meteorite!
'Doc

2290. Re: Kite design for 160M antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8q4680$j44$1@nntp9.atl.mindspring.net>
Source record: 180499

I would advise against the sled kite unless you are flying from a beach or other area that has very steady wind. It is rather sensitive to turbulence and will collapse and crash under less than ideal conditions. The most steady and reliable kite that I have flown (and I have flown most designs), is the delta or delta conyne. I have used both of these designs to lift cameras, banners, lights and antennas. The only real disadvantage is that large ones suitable for lifting are hard to come by ready made. If you are any good at constructing your own though, you can't go wrong with these designs.
--
CW
KC7NOD
"Lee Smith" <ckvnfm@mb.sympatico.ca> wrote in message
news:Cn5w5.551$kc6.15048@news1.mts.net...
>
> Here is one more URL which features a "double" version of the Scott Sled
> Kite. Looks like this could have some serious lift if scaled up a little.
> Enjoy!
>
> http://www.ntos.demon.co.uk/kite.htm
>
>

2291. Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Brett - N7OLQ <brett.miller_nospam_@intel.com>
Message-ID: <8q488p$rl@news.or.intel.com>
Source record: 180500
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

I'm looking for a new house and a few I'm looking at have high power lines not far away. I'm wondering what affects on the various HF or even VHF bands the power lines might have. No these are are not so close that my antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any advice is welcome. Can much of the affect be removed with the right antenna type & polarization?

Thanks
Brett - N7OLQ
http://N7OLQ.home.att.net/Radio

2292. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q22fp$g8m$1@iac5.navix.net>
Source record: 180536

Anything that create an RF point source (Read isotropic radiator) is marketing to the wrong crowd. I know a lot of bucks have been spent to try to approximate an isotropic source. My guess is that the moving parts must be oiled daily with snakeoil.

--

Fred W4JLE
http://w4jle.com/

"JerryL" <jlockett@lightspeed.net> wrote in message news:%ZPw5.7826$is5.348409@nntp1.onemain.com...
> Is this antenna a joke, or does it have merit?
>
> www.c2i2.com/~lasono/dovetron/main.shtml
>
> de jerry...
>
>

2293. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Uk0x5.1809$JV3.5920@newsfeed.slurp.net>
Source record: 180537

Wonder if the Rad Dept/War Dept was putting out disinformation about the Beverage antenna?

What became of those reported WWII German SWBC experiments using backscatter to determine signal strength in target areas? Did they morph into the 'woodpecker' of late?

K3BHJ

2294. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,cohe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917071154.00122.00000277@ng-cd1.aol.com>
Source record: 180538

>Unless NC has finally reach the conclusion many of us made several
>years ago: there is no reason why a fractally bent wire should make
>a better antenna than any randomly bent wire. For sure a fractal is
>worse than any properly designed antenna.
>

This is probably now a subject for the history of science. Certainly I will support the efforts of any scholar who pursues it.

It probably is the first major technology breakthrough in which the internet--specifically USENET--has been used as a propaganda tool to ATTEMPT to destroy it.

Some quick comments:

1) random structures are fractal. See Valdivia's thesis--available on the web--on random lightning as a fractal antenna;
2) In the case of a small self- resonant loop--such as MI2--the field strength and radiation resistance is incredibly sensitive to the geometry. It has nothing to do with 'origin symmetry' and ''length of the wire'.

I have no doubt that a small handful of other fractal antennas--including random fractal designs--have the capability of similar FOM's. Like to see one that works better though. Haven't seen any evidence for one yet!

99.999% of 'arbitrarily chosen' random fractal designs cannot acheive resonance nor the field strength of MI2 in it's form factor. Therefore it is an egregious lie to infer that arbitrariness is being used.

The orthogonality and the way L and C are produced in a bent wire strongly suggest that MI2 is an optimized struvture in a global sense. The $1000 Fractal Challenge is just such an effort to show a counter/ better example.

So, where is it?

73
Chip N1IR

2295. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917071640.00122.00000278@ng-cd1.aol.com>
Source record: 180539

Hey Rick--

With my 520 watts, and the info available on the web on my antenna, what IS my EIRP? Assume, say, a 1 dB insertion loss for the coax. Nice roundoff.

You seem to have severe doubts about my ability to calculate my EIRP, or some other excuse.

And yet you made a serious gaffe in determining the OUTPUT power of an SB220.

I would be curious to know what your CALCULATION of my EIRP on 10M is....

Please show us explictly;

73
Chip N1IR

2296. multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <39c4b006@turakina.six.asn.au>
Source record: 180540

There are several designs for multiband HF antennas eg.

Windom antenna (1939) http://www.shirakami.or.jp/~tada/JA7KPI/windom.html

G5RV (needs a tuner and coax acts as part of the antenna on some bands)

Multiband trap eg W8NX trap dipoles (requires traps and has trap losses)

Can anyone tell me, apart from being not usable on 15m, what is wrong with
the Windom antenna and why it is not used much any more????

Michael Hart
VK2JXI

2297. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,cohe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q2bgv$962$2@plutonium.btinternet.com>
Source record: 180541

Fractenna asked -

> The $1000 Fractal Challenge is just such an effort to show
a counter/ better example.
>
> So, where is it?
============================

Its been around since Hertz first used it. Its a half-wave
dipole bent into the form of a circle minus the pair of
balls.

Please let me have your plastic card details.

Reg

2298. Re: US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C4B278.721AF98C@mindspring.com>
Source record: 180542

Fractenna wrote:

> >My son, today, shared a paper on EE engineering ethics. Not to be unkind,
> >but
> >sorry Charlie! Star-Kist PhD Radio Astronomers don't get to be Senior RF
> >Engineers for major companies any more than MEd head-shrinkers do! I'll FAX
> >you a copy of the code, if you like.
> >
> > Rick K1BQT
> >
>
> Oh, can you explain that to the headhunters please? I'm getting tired of the
> phone calls, especially as I already have a position they can't match, let
> alone beat!
>
> What's that got to do with 'engineering ethics'?
>
> 73
> Chip N1Ir

Sue them for harassment! Tell them to quit stalking you.

2299. Re: It's about time!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: treasureh@aol.com
Message-ID: <20000917084425.02264.00000028@ng-fu1.aol.com>
Source record: 180543

its about time!

2300. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917085813.27430.00000051@ng-cr1.aol.com>
Source record: 180544

```
>Fractenna asked -
>
>> The $1000 Fractal Challenge is just such an effort to show
>a counter/ better example.
>>
>> So, where is it?
>============================
>
>Its been around since Hertz first used it. Its a half-wave
>dipole bent into the form of a circle minus the pair of
>balls.
>
>Please let me have your plastic card details.
>---
>Reg

It's exactly this type of ==deliberately--incorrect flotsam that makes HAM
RADIO foolish on a global scale.

Keep it up. See the results. Ultimately someone asks: EXACTLY WHY do we need
these 'hams'?

73
Chip N1IR
```

2301. Re: NEC4 Model of MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Kf3x5.2254$Cq6.189543@bgtnsc04-news.ops.worldnet.att.net>
Source record: 180545

"Fractenna" <fractenna@aol.com> wrote in message
news:20000915171158.15307.00000729@ng-fi1.aol.com...

> Incidentally, I find it disturbing that I am getting 'hate' mail now
(again!
> What is it with some of you guys!!) accusing me of being wrong; committing
> fraud; and so on, because of the fellow from Cushcraft's supposed
results.

First, Chip told the NG that he does not compete in the amateur markets.
His continual mentioning of Cushcraft in this manner is unacceptable. I
have asked him to stop this several times.

>
> I haven't read his posts and won't, but I have been told he claims that
any
> ARBITRARY origin-symmetric loop structure gives the same radiation
resistance,
> resonance, and efficiency as MI2.
>
>
> He is clearly wrong. For anyone to say this, they cannot have a good
handle on
> understanding:
>
> * mutual coupling;
> * resonance;
> * ohmic loss;
> * radiation resistance;
> * field strength.
>

Chip:

I guess you will have to read about it in the IEEE publications when I write
the article describing the performance of the arbitrary design re: the
Fractal one.

To state that I am clearly wrong or misunderstand basic antenna concepts
without looking at the NEC results or files is unbelievable. I guess its a
safe way of convincing yourself that you can't be wrong. The more you make
statements like this, the more your true character comes through. What a
bunch of sour grapes.

> Using words like 'directivity' and 'impedance' are cop outs that
deliberately

> avoid issues such as field strength and efficiency. I have no idea why
someone
> who claims to do antenna work would use NEC4 to get directivity rather
than
> field strength, or quote an impedance rather than a radiation resistance
(at
> the current max).
>

Now it's a problem with using nec4. I thought Roy told us that the version of EZNEC Chip uses has a NEC4 engine. Roy also ran my NEC4 file in EZNEC and confirmed my NEC4 impedance data.

>
> Field strength is the salient observable.
>
> I remind everyone that this Cushcraft person formally told us that he had
a 20
> turn spiral that had better 'directivity' than MI2. Of course it has a far
> lower field strength because it uses 4 to 5 times the amount of wire!

Wrong. Another misrepresentation of my statements by Chip. Here is the full quote of what I said - posted 9/7/00:

"The helical loop has a helical diameter of about 5 inches with about 20 helical turns per side. Using NEC4 to model the structure, it predicts the resonant frequency to be about 13.56 MHz. This is a lower resonant frequency than the MI2 Fractal Loop (I can change the configuration to match your resonant frequency but thought this to be unnecessary). The predicted resistance at resonance is 33.6 ohms which is closer to 50 ohms than the stated 26 - 30 ohms of the MI2 Fractal Loop. I won't state the antenna bandwidth because I do not know how you define it. Using my crude method of determining radiation efficiency, I predict it to be somewhere around 98% with number 10 wire. The predicted directivity and radiation patterns look very good."

Note that I said the directivity looks very good. I never said it was better than the MI2 loop because Chip would not tell me what dirctivity he calculated. Also note that Chip still claims that my loop design (not the design presented in this thread) has 4 to 5 times the wire if the MI2 Loop. I told him it had virtually the same wire length as the MI2 loop. These statements made above by Chip are an outright lie.

>
> Gee! Tiny phased arrays have OODLES of directivity and boy do they stink!
>
> Please: no more hate mail. It will get you into trouble.
>
> 73
> Chip N1IR

In my opinion, you demonstrate a total lack of moral character.

Steve, VE9SRB

2302. Re: It's about time!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917090058.27430.00000052@ng-cr1.aol.com>
Source record: 180546

...replaced WHAT network show in WHAT year? (What a mistake that was....)

Who were the stars?

Ooo! Ooo! (hint).

73
Chip N1IR

2303. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000917090641.19499.00000038@ng-fy1.aol.com>
Source record: 180547

>Please show us explictly;<

And step in a troll hole?

Rick K1BQT

2304. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,cohe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8q2i0k$g82$1@nnrp1.deja.com>
Source record: 180548

In article <20000917071154.00122.00000277@ng-cd1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> Some quick comments:
>
> 1) random structures are fractal. See Valdivia's thesis--available on
the
> web--on random lightning as a fractal antenna;

You really should avoid unqualified generalizations. SOME random
structures are fractal. Using your SWAG (super wild-ass guess) technique
(see below), 99.999% of random structures are NOT fractal.

> 2) In the case of a small self- resonant loop--such as MI2--the field
strength
> and radiation resistance is incredibly sensitive to the geometry. It
has
> nothing to do with 'origin symmetry' and ''length of the wire'.

Incredibly sensitive to the geometry? Do you really want to say that?
That statement makes me want to stay as far away as possible from the
MI2. To me, that means if there's an error in a length of a conductor or
an angle between two conductors, then I can't count on the radiation
resistance being anywhere close to what I want.

>
> 99.999% of 'arbitrarily chosen' random fractal designs cannot acheive
resonance
> nor the field strength of MI2 in it's form factor.

Nice SWAG. Absolutely meaningless number, however, unless you've
actually examined a huge number of different designs.

Hope this helps.73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2305. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q2gv0$fu0$1@uranium.btinternet.com>
Source record: 180549

The Windom is no better nor worse than most other sorts of
simple wire antenna in that it radiates nearly all the power
which is put into it - even on 15m. You've been listening
to the wrong old-wives' tales.

Reg, G4FGQ
==========
> Can anyone tell me, apart from being not usable on 15m,
what is wrong with
> the Windom antenna and why it is not used much any
more????
>
> Michael Hart
> VK2JXI

2306. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C4CA01.AB29ED77@bigfoot.com>
Source record: 180550

Michael Hart wrote:
> Can anyone tell me, apart from being not usable on 15m, what is wrong with
> the Windom antenna and why it is not used much any more????

Because of its single wire vertical feed, it has most of the
disadvantages of a vertical, e.g. requires a ground plane/
counterpoise. Because of its long horizontal span it has most
of the disadvantages of a horizontal, e.g. requires two supports.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2307. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000917095749.13211.00000038@ng-fd1.aol.com>
Source record: 180551

>Anything that create an RF point source (Read isotropic radiator) is
>marketing to the wrong crowd. I know a lot of bucks have been spent to try
>to approximate an isotropic source. My guess is that the moving parts must
>be oiled daily with snakeoil.
>
>--
>
>Fred W4JLE

Closest thing to isotropic radiator is a lightbulb, broadband and lights things up and is cheap. Efficiency approaches Freaktal stuff.

Yuri

2308. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C4CBF7.E68529F8@bigfoot.com>
Source record: 180552

Reg Edwards wrote:
> The Windom is no better nor worse than most other sorts of
> simple wire antenna in that it radiates nearly all the power
> which is put into it - even on 15m. You've been listening
> to the wrong old-wives' tales.

Here's what my 1957 ARRL Handbook says about the Windom:
"The antenna will operate satisfactorily on the even-harmonic frequencies, and thus a single antenna can be made to serve on the 80-, 40-, 20-, and 10-meter bands." It can be inferred that the author thought the feedpoint impedance caused a matching problem on 15m.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2309. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Mak <Asylum140@NOSPAMbtinternet.com>
Message-ID: <8q2j8p$qa2$1@uranium.btinternet.com>
Source record: 180553

> I am sure that you will find and inverted "L" configuration easier to set
up
> and operate.
>
> Makes a great restricted space all band HF antenna.
>
> Run the inverted L wire up and out for as long as you can manage, then
feed
> it near the "actual" ground [not high up in the air as you propose]
against
> "a few good counterpoises" of approximately 1/4 electrical wl at each of
> your favorite operating frequencies.
>
...

Thanks to all so far (and please keep going - I'm checking out all the references/programs as we go) - but ...

I really am stuck for both height and space. This is a softly, softly antenna (idea), simple (phyically) and unobtrusive (I think I can talk my way out of one (or two) strings of wire but that's about all.)

My shack is at the 'wrong' end of the house and the cable run is full of noisey cables - hence my desire to fed with coax. The feed oulet is the highest point in this equation, the aerial must go down in height away from the house. I can't see me making an inverted L fit here - at a push I could run the vertical up first but it would be next to the house brickwork (I had previously discounted this as a bad move - maybe not; what you you think).

A good all-rounder is fine and would suit me to a tee.

73s

2310. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C4D487.7A59BBBB@bigfoot.com>
Source record: 180554

Mak wrote:
> My shack is at the 'wrong' end of the house and the cable run is full of
> noisey cables - hence my desire to fed with coax. The feed oulet is the
> highest point in this equation, the aerial must go down in height away from
> the house. I can't see me making an inverted L fit here - at a push I could
> run the vertical up first but it would be next to the house brickwork (I had
> previously discounted this as a bad move - maybe not; what you you think).

The fact is there is not much difference in running coax with its
braid floating and running a single wire. Much of your RF current
will be flowing on the outside of the braid causing all the problems
that you are trying to avoid by using coax. Floating the braid at
the antenna feedpoint is virtually identical to an inverted-L.

Sounds like an inverted-V might work for you. Put a choke at the
feedpoint to help tame common-mode currents on the coax braid.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2311. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: W&B <azholguinfamily@earthlink.net>
Message-ID: <0T4x5.2625$Vu5.154374@newsread2.prod.itd.earthlink.net>
Source record: 180555

Because your easy way costs money and isn't as much fun to make.

Wade

2312. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q2n6l$95p$1@slb6.atl.mindspring.net>
Source record: 180556

Mak:

Unless there is a lot of conductive material behind the brickwork [sheet metal or metallic chimney, or ...] the rising part of the inverted L near the brickwork should be no problem. I have tacked such risers along the tree trunks of pine trees and the side of concrete block and brick walls with no ill effects.

I would arrange for it to run an inch or two off the brickwork if possible, either with standoff insulators or what's often easier, simply pull the vertical run taught [that's what I usually do, unless the inverted L is hung in a tree which sways in the wind].

As Cecil [aka CAM] says the single wire riser is just as good, if not better, than a coaxial feed in which the outside of the braid/outer conductor will radiate anyway.

At least with the single wire riser/element for the inverted L you will not be fooled into thinking that it does not radiate or pick up unwanted noise.

It will radiate anyway from the outside of the coax.

With the single wire "L" riser/element you will tend to arange and dress it physically to make it a more efficient radiator, while with coax you will be lulled into thinking it doesn't radiate and dress it incorrectly, lying it alongside metallic stuff, etc...

Setting up as an inverted L will keep you focused on making the whole antenna an efficient radiator.

Good luck and keep us informed of your progress and efforts.

Getting on the air with an effective HF radio station is not as challenging as the antenna manufacturers would have you believe.

Do you have a good antenna tuner?

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Mak <Asylum140@NOSPAMbtinternet.com> wrote in message
news:8q2j8p$qa2$1@uranium.btinternet.com...
> > I am sure that you will find and inverted "L" configuration easier to
set
> up

> > and operate.
> >
> > Makes a great restricted space all band HF antenna.
> >
> > Run the inverted L wire up and out for as long as you can manage, then
> feed
> > it near the "actual" ground [not high up in the air as you propose]
> against
> > "a few good counterpoises" of approximately 1/4 electrical wl at each of
> > your favorite operating frequencies.
> >
> ...
>
> Thanks to all so far (and please keep going - I'm checking out all the
> references/programs as we go) - but ...
>
> I really am stuck for both height and space. This is a softly, softly
> antenna (idea), simple (phyically) and unobtrusive (I think I can talk my
> way out of one (or two) strings of wire but that's about all.)
>
> My shack is at the 'wrong' end of the house and the cable run is full of
> noisey cables - hence my desire to fed with coax. The feed oulet is the
> highest point in this equation, the aerial must go down in height away
from
> the house. I can't see me making an inverted L fit here - at a push I
could
> run the vertical up first but it would be next to the house brickwork (I
had
> previously discounted this as a bad move - maybe not; what you you think).
>
> A good all-rounder is fine and would suit me to a tee.
>
> 73s
>
>

2313. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q2q29$u4c$1@nntp9.atl.mindspring.net>
Source record: 180557

Reg:

Many have done that simple calculation long ago.

But then... just dismissing fractal electromagnetics as just some overwraught pompus posturing over superficial minor modifications of existing antenna structures, and relegating the fractenna postings to the delete file would have deprived the serious NG reader of hours of fun, comedy, excitement, and humor.

Where else can one observe an Ivy League Ph.D. squirming and fuming in such a delightful fashion and feel guilt free? Such behavior would not be tolerated at a Ph.D. thesis defense!

For many NGparticipants here the fractanal antics seems like a vicarious participation in the ancient and inhuman Roman "bear baiting" sport/amusement and without the guilt arising from baiting a poor caged dumb animal.

Here the "animal" has a Ph.D. and seeks to be baited. Simply for the pleasure of the NG participants.

Reg, would you really seek to end this "punch and judy" show?

Other than futile threatening gestures from the "bear" and largely phony threats from mercenary and possibly imaginary legal firms there is really no RSPCA to protect the bear and remove the NG participants "fun".

I for one would hate to see dear Dr. Chip, Ph.D. N1IR, NC, C++, Nathan Cohen, CTO, etc.... depart this NG.

For... without his sitcom antics, this NG would be but a pale imitation of it's current delightful incarnation.

And there would be no place for the world to learn "the truth" about fractal electromagnetics!

Thoughts, comments,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:8pu1dj$ga8$1@plutonium.btinternet.com...
> Steve, does that mean we've come to the end of Fractals on

> this newsgroup ? How sad.
>
> And couldn't the same conclusion have been reached a couple
> of years back within 30 seconds and a few mental
> calculations ?
> ---
> --
> Regards from Reg, G4FGQ
> http://www.btinternet.com/~g4fgq.regp
> --
> Steve concluded -
>
> > Although certainly interesting, the Fractal nature of the
> antenna
> > geometry is not the significant factor in determining the
> antenna
> > performance.
>
>
>

2314. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C4EEBB.F51AEEDE@hiwaay.net>
Source record: 180558

Peter- you should realize that your statement (see below) incorporated a serious percentage of random accusation, and therefore is Fractal in nature. You may already be a winner in the "I will sue" sweepstakes.

I hope this helps - Bill-W4BSG

"Peter O. Brackett" wrote:
>
> Reg:
>
> Many have done that simple calculation long ago.
>
> But then... just dismissing fractal electromagnetics as just some
> overwraught pompus posturing over superficial minor modifications of
> existing antenna structures, and relegating the fractenna postings to the
> delete file would have deprived the serious NG reader of hours of fun,
> comedy, excitement, and humor.
>
> Where else can one observe an Ivy League Ph.D. squirming and fuming in such
> a delightful fashion and feel guilt free? Such behavior would not be
> tolerated at a Ph.D. thesis defense!
>
> For many NGparticipants here the fractanal antics seems like a vicarious
> participation in the ancient and inhuman Roman "bear baiting"
> sport/amusement and without the guilt arising from baiting a poor caged dumb
> animal.
>
> Here the "animal" has a Ph.D. and seeks to be baited. Simply for the
> pleasure of the NG participants.
>
> Reg, would you really seek to end this "punch and judy" show?
>
> Other than futile threatening gestures from the "bear" and largely phony
> threats from mercenary and possibly imaginary legal firms there is really no
> RSPCA to protect the bear and remove the NG participants "fun".
>
> I for one would hate to see dear Dr. Chip, Ph.D. N1IR, NC, C++, Nathan
> Cohen, CTO, etc.... depart this NG.
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> For... without his sitcom antics, this NG would be but a pale imitation of
> it's current delightful incarnation.
>
> And there would be no place for the world to learn "the truth" about fractal
> electromagnetics!
>

> Thoughts, comments,
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
> news:8pu1dj$ga8$1@plutonium.btinternet.com...
> > Steve, does that mean we've come to the end of Fractals on
> > this newsgroup ? How sad.
> >
> > And couldn't the same conclusion have been reached a couple
> > of years back within 30 seconds and a few mental
> > calculations ?
> > ---
> > --
> > Regards from Reg, G4FGQ
> > http://www.btinternet.com/~g4fgq.regp
> > --
> > Steve concluded -
> >
> > > Although certainly interesting, the Fractal nature of the
> > antenna
> > > geometry is not the significant factor in determining the
> > antenna
> > > performance.
> >
> >
> >

2315. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39c4f8f4.40265869@news.azstarnet.com>
Source record: 180559

On Thu, 14 Sep 2000 20:15:16 GMT, "Terrence R. Redding, Ph.D."
<terry@oltraining.com> wrote:

>Thus providing some support for the notion that a formal education
>decreases one's ability to think.
>
>Terry - W6LMJ

I once worked with a fellow engineer who had a PhD (CalTech) and had once held tenure at the University of Arizona.

When I sometimes bemoaned my lack of higher education, he would console me with:

"You should only go to school until you get smart enough to quit. Some people just take longer that others."

Wes N7WS

2316. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q2us8krj3@uranium.btinternet.com>
Source record: 180560

I cannot let the present stage of the fractal deer-baiting saga pass by without saying how much I have admired the great courage, ingenuity and enormous persistence displayed for several years by Fractenna, the solitary, isolated, Bambi ?) deer, in the face of what must have been the most prolonged and vicious attacks, from a more tormenting, slavering pack of wolves, smelling blood, sheltering behind numbers, than in any other campaign since the Internet began.

If any of you crowd of bullies should think Frac has been mortally wounded, think again. He's hardly been scratched. He's stronger because of it. You'd better retire to your corners, lick your wounds and nurse your guilty consciences. Either change tactics or the subject.

Boiiiiinnnngg ! - Seconds out !
--
Reg, G4FGQ

Peter O. Brackett wrote -
> Many have done that simple calculation long ago.
>
> But then... just dismissing fractal electromagnetics as just some
> overwraught pompus posturing over superficial minor modifications of
> existing antenna structures, and relegating the fractenna postings to the
> delete file would have deprived the serious NG reader of hours of fun,
> comedy, excitement, and humor.
>
> Where else can one observe an Ivy League Ph.D. squirming and fuming in such
> a delightful fashion and feel guilt free? Such behavior would not be
> tolerated at a Ph.D. thesis defense!
>
> For many NGparticipants here the fractanal antics seems like a vicarious
> participation in the ancient and inhuman Roman "bear baiting"
> sport/amusement and without the guilt arising from baiting

a poor caged dumb
> animal.
>
> Here the "animal" has a Ph.D. and seeks to be baited.
Simply for the
> pleasure of the NG participants.
>
> Reg, would you really seek to end this "punch and judy"
show?
>
> Other than futile threatening gestures from the "bear" and
largely phony
> threats from mercenary and possibly imaginary legal firms
there is really no
> RSPCA to protect the bear and remove the NG participants
"fun".
>
> I for one would hate to see dear Dr. Chip, Ph.D. N1IR, NC,
C++, Nathan
> Cohen, CTO, etc.... depart this NG.
>
> For... without his sitcom antics, this NG would be but a
pale imitation of
> it's current delightful incarnation.
>
> And there would be no place for the world to learn "the
truth" about fractal
> electromagnetics!
>
> Thoughts, comments,
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
> news:8pu1dj$ga8$1@plutonium.btinternet.com...
> > Steve, does that mean we've come to the end of Fractals
on
> > this newsgroup ? How sad.
> >
> > And couldn't the same conclusion have been reached a
couple
> > of years back within 30 seconds and a few mental
> > calculations ?
> > ---
> > --
> > Regards from Reg, G4FGQ

> > http://www.btinternet.com/~g4fgq.regp
> > ----------
> > Steve concluded -
> >
> > > Although certainly interesting, the Fractal nature of
the
> > antenna
> > > geometry is not the significant factor in determining
the
> > antenna
> > > performance.
> >
> >
> >
>
>

2317. Re: How do i convert TV 5 element Antenna to 2 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8q30chvva1@nnrp1.deja.com>
Source record: 180561

http://www.hamsnet.net/kd4owl/antenna/

In article <8q0q15lnu1@nnrp1.deja.com>,
harryvetch@my-deja.com wrote:
> I have a new TV antenna that needs to be converted to 2 meters. So far
> have drilled out the elements and cut them to length acroding to at
> least one web site advertised on arrl. what gets me is ive come acrost
> more then one with different specs. Can somone tell me which is the
> right way? 16 inch or 20 inch spacing between elements? This is just
> one example these pages state.
>
> Thanks
> Lorin
> KB7TFW
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

2318. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000917134202.03532.00000597@ng-fl1.aol.com>
Source record: 180562

> Would like to lay a 17M extended double zepp across the top of my roof, then feed with coax to the shack. How do I put together a matching section at the feedpoint?<

1. Don't put it on the roof, keep it well above the roof--especially if there's any wiring, flashing, or aluminum-backed insulation there.

2. Cut your radiators 5/8 wave per side and add inductors at the feedpoint to tune out the capacitive reactance (shouldn't take much--a few turns of miniductor). That should leave you with somthing approaching 100 ohms non-ractive at the center.

3. To feed it, make a line transformer using an electrical quarter-wave of 75 ohm coax. This will bring that 100-ohm feedpoint down to 50 ohms.

4. Wind the 1/4-wave hunk of 75-ohm coax into a choke balun at the feedpoint to decouple the outer shield feed from the balanced radiator.

5. Adjust coil inductance and element length, as needed, for minimum VSWR. Should be able get it flat.

Now the "tuner" is built into the antenna, and you won't ever have to mess with it again!

Rick K1BQT

2319. Re: FracTriad I tried to build one but have a few questions?? HI HI

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <UG7x5.2822$Vu5.168177@newsread2.prod.itd.earthlink.net>
Source record: 180563

Really!!! I tried real hard but just could not get one of your designs to perform the way you describe. Is it me or is your data somehow flawed? Seeing as you are such a wise person and probably a professor, it must be that I am stupid!! I will keep trying as I beleive every word you write. Keep us posted on this new and exciting area of antenna design.
Larry N0SA
PS: I love your humor!!!!
Richard Clark <rwclark@rwcl
ark.seanet.com> wrote in message
news:TdHCOViyKfHiigEBuXtBWEqg29bs@4ax.com...
> Hello Dear Readers of the fractal Persuasion,
>
> FracTriad is three offerings derived from one main fractal design. That main fractal
> design, a Koch second iteration triadic, is supported by three insulated guys that attach
> near the elevated feedpoint and travel downward to ground at an angle of 45 degrees. This
> basic construction is applied as three variations at two elevations. The simplest design
> variation, the Fractalope, is complete in its data and the remaining designs have "gaps."
> I will be closing up those gaps this weekend.
>
> Your mission, should you care to accept it, is to construct the antenna:
> 1. For each guy, measure out from the feed point end as indicated in the Design Details
> and attach a tie-wrap (there are 16 - 17 spread over the three guys);
> 2. On the ground (never attempt to do this above ground) tie off the three guys to a
> common anchor and then spread them to three remote anchors that create a span of 45
> degrees overall (the pictures will reveal all);
> 3. At the feed point end connect a 14.3 meter length of wire to your 1:1 Current BALUN.
> The BALUN should be mounted very near (if not at - or serve as) the guy's common
> attachment;
> 4. Pass the unconnected end through the loops already installed in step 1.
> 5. What follows has several options. Basically if you can establish the 45 degree spread
> and tension on all guys, you only need to attach the far end at the last tie-wrap. Or you

> can tie-wrap all 16 - 17 points. The advantage of the single attachment
is it may give
> you flexibility if guy anchoring is problematic.
>
> The five steps above are the not the complete drill, but they are the
common steps for
> which ever design variation you decide to choose.
>
> qsl.net's ftp server still appears to be down so I have posted the new
pages at:
> http://www.seanet.com/~rwclark/fractal/
> and follow the links to "Practical Designs" (the first link at the top of
the next page).
>
> This is a work in progress. Incomplete. Redundant. Perhaps an error ;-)
>
> 73's
> Richard Clark, KB7QHC
>

2320. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C4FB9E.1E3@wt.net>
Source record: 180564

David J. Windisch wrote:
>
> Wonder if the Rad Dept/War Dept was putting out disinformation about the
> Beverage antenna?
>
> What became of those reported WWII German SWBC experiments using backscatter
> to determine signal strength in target areas? Did they morph into the
> 'woodpecker' of late?
>
> K3BHJ

I'm sure glad they got rid of that nasty thing. Or at least the 1980's
russian version. I hated that blasted thing. It was generally assummed
to be over the horizon radar. I remember back when I worked 15m in those
days. I'd start working some good station, and that blasted peckerwood
would fire up. And the dang thing seemed to follow me everywhere I
went...:< MK
--
http://web.wt.net/~nm5k

2321. Re: It's about time!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000917160107.06383.00000160@ng-cu1.aol.com>
Source record: 180565

>From: "Pete" Pete@xyz.com

>What a relief it is, I didn't see the word fractenna mention in this NG
>today.

Until now...

:-)

73,
Ed Hare, W1RFI

2322. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000917160553.06383.00000161@ng-cu1.aol.com>
Source record: 180566

>From: klocko@toad.net

>> 99.999% of 'arbitrarily chosen' random fractal designs cannot acheive
>resonance
>> nor the field strength of MI2 in it's form factor.
>
>Nice SWAG. Absolutely meaningless number, however, unless you've
>actually examined a huge number of different designs.

Actually, I think that examining 10 random designs would let one say that 90% of randomly chosen designs will not be resonant.

Besides, one could say that 90% of randomly chosen lengths of doublet are not resonant on a particular frequency, too, especially if one did not define the limits of "resonance."

73,
Ed Hare, W1RFI

2323. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000917161943.06383.00000163@ng-cu1.aol.com>
Source record: 180567

>From: Terry Redding

>Odd, my SB-220 produces 2.7 KV in the high power position.

Perhaps he used 10log(V) to calculate the voltage. :-)

73,
Ed Hare, W1RFI

2324. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000917163052.07253.00000389@ng-fy1.aol.com>
Source record: 180568

>>Odd, my SB-220 produces 2.7 KV in the high power position.
>
>Perhaps he used 10log(V) to calculate the voltage. :-)
>
>73,
>Ed Hare, W1RFI
>

For a linear scale??

NC

2325. It's about time!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 03:27:16 UTC
From: Pete <Pete@xyz.com>
Message-ID: <oSWw5.46538$Qx4.1618130@news1.rdc1.il.home.com>
Source record: 180528

What a relief it is, I didn't see the word fractenna mention in this NG today.

2326. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 03:46:17 UTC
From: W&B <azholguinfamily@earthlink.net>
Message-ID: <d8Xw5.5691$ks.129708@newsread1.prod.itd.earthlink.net>
Source record: 180529

Coils of what on a piece of PVC?
I like the ladder line idea, but not sure how to form.

Wade

2327. US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 04:32:41 UTC
From: Dave Moen <dmoen@mac.com>
Message-ID: <B5E99762.1912%dmoen@mac.com>
Source record: 180530

Leading Phoenix, Arizona based company is hiring 20 Senior RF Engineers for full time positions.

The company is willing to relocate candidates but, will give a preference for Phoenix, Arizona based candidates.

Please, forward your resume with contact information for consideration.

Will forward the job descriptions ASAP, as these positions just opened today the job descriptions will not be complete until later this afternoon.

2328. Re: How Can I Match a 17M EDZ to COAX?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 05:02:11 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <nfYw5.211457$i5.2923911@news1.frmt1.sfba.home.com>
Source record: 180531

Hey guys, why not do it the easy way?
(Tongue so firmly in cheek that it hurts...)

Match-all Automatic Antenna Matcher is a solid state, non-resonant, broadbanded antenna matching device, independent of resonant lengths of radiating wire or elements to attain proper tuning and radiating results. Also unnecessary are activating rf input signals, control leads or DC voltages to instantly match virtually any antenna configuation on all HF bands including amateur and commercial, i.e. 2-30 Mhz. The input maintains a constant 50 ohms input impedance over the full frequency range. This device has been used by military services in spread spectrum applications and by commercial and fishing vessels. The unit is new-in-box, easy and ready to install.

And the bidding is only at $30.00 on E-Bay!

73
Mike Camp ki7fq
El Cerrito, CA
"CAM" <cam2338@bigfoot.com> wrote in message
news:39C43BA8.C07D6D30@bigfoot.com...
> W&B wrote:
> > Would like to lay a 17M extended double zepp across the top of my roof,
then
> > feed with coax to the shack. How do I put together a matching section
at
> > the feedpoint?
>
> With a 17m EDZ up at 40ft, EZNEC sez it should be 64.5ft long and fed
> with 9.3ft of 450 ohm ladder-line for a 50 ohm SWR of 1.4:1. I wouldn't
> lay it on the roof. Can you suspend it above the roof? Adjust the 9.3ft
> series section length until you get minimum SWR.
>
> In general, an EDZ is 1170/freq and the series matching section (series
> transformer) is about 0.185 wavelength (including velocity factor).
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2329. Re: Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 05:10:30 UTC
From: sylvandb@hotmail.com
Message-ID: <slrn8s8h1t.6u.Zsylvan+noZs_0009@p100.dbutler.org>
Source record: 180532

On Fri, 15 Sep 2000 22:51:22 -0500, SteveTheGeek - West Central, IN
<stevethegeek@newmail.net> wrote:
>I'm into the planning stage of building a tower approx 100-120' high. Why so
>high you say?? I live in a woods and the average tree height around my
>property is 90'.

Wow... Impressive trees.

>I need the height for my DDS dish. The dish is unable to obtain the
>satellite signal ANYWHERE on my property at or near ground level. I just
>have too many tall SW trees...btw, I could cut a path but my half would kill

I think rather than such a huge tower, you should mount the DDS dish on your
roof, and cut a few trees around the house. Tell the other half that it is
for safety -- fire, wind, whatever, you should have a larger clearing around
the house itself.

With the dish hopefully 20ft up (near a peak) toward the north side of your
roof, the nearest tree will be on the other side of the house and yard.
Worst case the dish will be 1/2 the house plus the yard before the first tree.

sdb

--
More guns means less crime. ISBN:0-226-49363-6
***
Watch out for munged e-mail address.
User should be sylvan and host is cyberhighway.net.
Do NOT send me unsolicited commercial e-mail (UCE)!

2330. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 05:53:03 UTC
From: thompson@mindspring.com
Message-ID: <8q1mou$440$1@nntp9.atl.mindspring.net>
Source record: 180533

Vlad,

No need for a 9:1 balun. I built one on a big core a few years ago, but find that the balun in my Ten Tec 229 tuner
is all I need. If you don't have one in a tuner then the W9INN remote balun will do nicely.
73 Dave K4JRB

<kb9olm@hotmail.com> wrote in message news:8q0r6q$n10$1@nnrp1.deja.com...
> Please help guys!
> I need a 9:1 balun for the Van Gorden "shorty" all band dipole, which
> is fed with a 450 ohm balanced transmission line. I am running up to
> 150 watts to antenna.
> Please reply directly to Vlad at: kb9olm@hotmail.com
> Tnx,
> Vlad
> kb9olm

2331. Re: Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 06:24:29 UTC
From: "SteveTheGeek - West Central, IN" <stevethegeek@newmail.net>
Message-ID: <ss8op1g3h3t108@corp.supernews.com>
Source record: 180534

I tried mounting the dish on the north side of the houses' roof, still
couldn't clear the tree tops...My house is a modular and the apex is only
10' high

Steve - N9MGB

<sylvandb@hotmail.com> wrote in message
news:slrn8s8h1t.6u.Zsylvan+noZs_0009@p100.dbutler.org...

>
> With the dish hopefully 20ft up (near a peak) toward the north side of
your
> roof, the nearest tree will be on the other side of the house and yard.
> Worst case the dish will be 1/2 the house plus the yard before the first
tree.
>
> sdb

2332. Re: Lightening Rod...aka Tower Installation tips

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 06:28:59 UTC
From: "SteveTheGeek - West Central, IN" <stevethegeek@newmail.net>
Message-ID: <ss8p1f2bh3t128@corp.supernews.com>
Source record: 180535

About two years ago the only line-of-sight I could find was the current mounting location. Eariler this year, I had my dish upgraded. An installer attempted to get a better line-of-sight. They tried for over 4 hours and still couldn't get a better shot than what I had.

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:2197-39C3DCC6-6@storefull-114.iap.bryant.webtv.net...
> Steve, N9MGB wrote:
> "I just have too many tall SW trees."
>
> Too bad you are situated so far North. But, if there is a clearing
> within sight of the satellite and cable distance of your house, a
> ground-supported dish might be practical.
>
> Best regards, Richard Harrison, KB5WZI
>

2333. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-17 23:25:43 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <39c55330@turakina.six.asn.au>
Source record: 180501

I found it in my Radio Handbook handbook also (20th ed - 1978). Yes it says it is single wire fed. THis does present a problem.

However the Windom antenna on the www page I gave is feed directly from coax through a 4:1 balun. It soes seem to have SWR problems on 15m.

Since the guy on the www page I looked at has actually built one fed by coax and measured the SWR on each band I am happy to take his [measured] results as fact. The thrust of my question was along the line of radiation efficiency.

Does anyone know what sort of radiation effeciency can be expected from each of the antennas. If they are about the same I may simply convert my 80m dipole into a Windom.

Michael

CAM wrote in message <39C4CBF7.E68529F8@bigfoot.com>...
>Reg Edwards wrote:
>> The Windom is no better nor worse than most other sorts of
>> simple wire antenna in that it radiates nearly all the power
>> which is put into it - even on 15m. You've been listening
>> to the wrong old-wives' tales.
>
>Here's what my 1957 ARRL Handbook says about the Windom:
>"The antenna will operate satisfactorily on the even-harmonic
>frequencies, and thus a single antenna can be made to serve on
>the 80-, 40-, 20-, and 10-meter bands." It can be inferred that
>the author thought the feedpoint impedance caused a matching
>problem on 15m.
>--
>73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2334. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Wayne Grauel <wgvideo@attglobal.net>
Message-ID: <39C6C40F.68F9BC33@attglobal.net>
Source record: 180369
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

I'd do the AM radio thing no matter where I moved. You don't need Distribution Lines to have electrical noise, just have a neighbor with a swimming pool or (don't ask me why)... but a funeral home across the street (at least i think they were the culprit). the Electrical noise was so bad that I had to get cabel TV to watch anything below channel 7. (then I moved next to the pool!!!) But that's OK, I installed a Sat Dish and it doesn't mess up the radio plus...it's an indoor pool and we have a key!

Brett - N7OLQ wrote:

> I'm looking for a new house and a few I'm looking at have high power lines
> not far away. I'm wondering what affects on the various HF or even VHF
> bands the power lines might have. No these are are not so close that my
> antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any
> advice is welcome. Can much of the affect be removed with the right antenna
> type & polarization?
>
> Thanks
> Brett - N7OLQ
> http://N7OLQ.home.att.net/Radio

2335. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <rahdss8u1hgdsl1sq7vljum5o69uk5m4eq@4ax.com>
Source record: 180370

On 07 Sep 2000 12:18:53 GMT, w1rfi@aol.com (W1RFI) wrote:
>I very much want to hear any and all reports of interference to hams from Part
>15 devices. Two ARRL Board committees are studying the problem and I want to
>send them any actual cases.

One of our local hams has 2.4 GHz wireless LAN products in use in his home,
and also 2.4 GHz cordless phones. Both use spread spectrum, of course, and
neither interferes with the other to a noticable extent. But, now comes wireless
broadband provided by AT&T (ex-Media One). Their provider site is less than
half a mile (line of sight) from his home. Now his phones suffer severe interference,
and the wireless LAN retry rate is noticably increased.

So far, no ill effects have been noted to his HF, VHF, or UHF amateur operation.
BTW his amateur operations haven't bothered his cordless phones or wireless
LAN or vice versa. If they are now bothering his neighbors who use the wireless
broadband distribution, no one has yet complained to him about it.

At the site of the wireless broadband provider are amateur radio repeaters
and television remote broadcast microwave links (for picking up the signals
of remote TV broadcast vans and relaying them back to the studio). On one
amateur UHF repeater (443.025), a buzz, which was not there before, can
now be heard under weaker signals. (Possibly a fundamental overload problem,
though a good pass/reject duplexer is used, and no current problems exist with
the over 100 other transmitters on the site, paging, cellular, LMR, LPTV, etc.)
This hasn't significantly impacted operation, but it is a nuisance that has resisted
attempts to suppress it.

Interference to the TV remote broadcast microwave link receiver is much more
severe. Hits can be seen periodically in the video, especially when using vertical
polarization. (The wireless broadband transmit antenna is vertically polarized.)
As a practical matter, the site is now useless for vertical, LHCP, or RHCP reception,
and has had to be restricted to only horizontal polarization to avoid significant
signal degradation. This is a fairly serious limitation because CP is the preferred
polarization to resist multipath (IE ghosting) of the signals from the remote vans.
Attempts to resolve the problem have so far been fruitless.

It would appear that wireless broadband may not be as good a spectrum neighbor
as has been portrayed, especially if one is near the source of the transmissions.
But at least the impact on amateur operations on popular bands seems to be minimal.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2336. Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Sam <sam_a_34@yahoo.com>
Message-ID: <39c238d5$1@news>
Source record: 180371

What commercial vertical antenna, 10-20 meters do you all recommend and why?

Sam

2337. Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Kline Wilson <tennis@olypen.com>
Message-ID: <sLBx5.31254$XT1.512214@news5.giganews.com>
Source record: 180372

Hi,

I am considering putting up a short loaded dipole, primarly for 80m. It would be about 70 ft long (the max distance I can get across my house) and only a few feet above my roof. It will be in a shallow inverted V configuration, but not symetrical. One version would use one set of coils. The other would use 2 sets of coils and would provide operation on 40 and 15 as well as 80m.

Would there be much difference in performance on 80m between the two systems?

Should I use a balun? I will have about 125 feet of coax running along the roof and into the house.

Thanks for the advice...

73s Kline w7cnn@arrl.net

2338. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C6E816.6552C43A@bigfoot.com>
Source record: 180373

Tom W8JI wrote:
> 1:1 Choke baluns "care less" what the differntial mode impedance is,...
> Even if you play with feeder length to limit differential mode
> impedance, it is no guarantee you've changed the common mode impedance
> favorably.

What you say is true about inducted common-mode currents. Hopefully, the antenna system geometry minimizes these inducted currents. What I am referring to are the *conducted* common-mode currents as discussed in Roy's article, "Baluns: What They Do And How They Do It", in the ARRL Antenna Compendium Vol 1. With a dipole and no choke, if the impedance seen looking back down the outside of the coax shield is much less than the feedpoint impedance of the antenna, Ohm's laws says the current tends to *conduct* down the coax rather than into the antenna. In this case of conducted currents, the differential mode impedance can affect the initial conduction/generation of common-mode currents.

Seems worst case for conducted common-mode currents might be a full-wave dipole fed with 1/2WL of coax measured along the outside braid and using no choke. The differential current on the inside of the braid has the choice of becoming common-mode current into a high impedance antenna or onto a low impedance path to ground down the outside braid of the coax.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2339. Re: Where to get or how to make Capacitance top hat for a screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C6EB7B.B1011412@bigfoot.com>
Source record: 180374

Benjamin Blavat wrote:
> The title is my question? Please email any ideas. I am trying to do this
> cheaply. Thanks,

Here's a picture of mine. If you're handy with metalworking, it
can be homebrew. I bought mine from Henry, the Texas Bugcatcher
guy and added eight stingers to it.
--
http://people.delphi.com/cecilmoore/mobnow.htm

2340. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Kevin_Maly@SPAMMER.jdshdsjh.com
Message-ID: <soibssc3731jevi3povdv4um2p9i9htjaa@4ax.com>
Source record: 180422
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

On Mon, 18 Sep 2000 01:50:29 -0500, Richard McCollum
<5Vix5.10416$0y5.529563@nntp3.onemain.com> wrote:

>
>Do the radio thing anyway; goofy noise sources are everywhere. And try to
>stay away from 400k ERP television stations and 100k FM if at all possible.

Not to mention any AM broadcasters within a half-mile of the house if 1000 kW
or less. Anything stronger is a problem for 1.8-2.0 and other HF ham bands.
I lived near an AM transmitter in Michigan and it even caused problems on the
CB band, I was only 300 yards away from the transmitter though.

2341. ? V logperiodic design.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: cajo1@my-deja.com
Message-ID: <8q4kh6pkn1@nnrp1.deja.com>
Source record: 180423

I have the ARLL Antenna handbook and locking for more (practical)

designs for the V logperiodic anyone know were to find something.

REGARDS from CAY in SWEDEN.

Sent via Deja.com http://www.deja.com/
Before you buy.

2342. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C5CBA3.3433@wt.net>
Source record: 180424

Arthur Unwin wrote:
>
> 1KW on 10 metres? It used to be considered bad form
> in the olde days and evidence of a poor antenna.
> I suppose now you use power to be heard and a
> cell phone for your report, in fratured English of course
> Art KB9MZ

It's not needed thats for sure. My amp will do a KW on 10m, but it's never done it on the air. Only thru a dummy load..:/ I rarely run an amp above 20 meters. I did cheat running 20m sstv...I ran a solid 300-400 watts output for my video using the henry. That was just loafing along, but made a great difference in my pix quality reports. My need for an amp is usually on the low bands in the summer. The static makes it rough many times without one. MK
--
http://web.wt.net/~nm5k

2343. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C5CFEE.7D17@wt.net>
Source record: 180425

Bill Aycock wrote:
>
> Did I miss something again-? I thought I had read everything posted
> here, and I do NOT remember a death threat. I'm sure I would have
> remembered one if it was from Tom, or any of the regulars. I remember
> when Chip dodged the club meeting, and I remember all his talk about
> police at the "open house", but not anything serious.
>
> Can someone give me the date and time, so I can read it for myself?
>
> Bill-W4BSG

Knowing his past histronics on the subject in the past, I don't even bother looking any more. No telling what required the police at the frectal party... They may have him under surveillance...:/ MK
--
http://web.wt.net/~nm5k

2344. Stupid question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: oh3nx.nopespam.@sral.fi
Message-ID: <8FB389FFDjoenonenonecom@192.89.123.233>
Source record: 180426

Pardon me, but I got a stupid idea.

If we have a G5RV multiband dipole and the matching to a 50 ohm output transmitter coax is handled with a specific length of 300-450 ohm ladder line, can we apply the same matching approach to a vertical antenna?

Then we would have half of the "G5RV" standing up, the other half being represented by ground radials, and fed like G5RV, and voila, we would have a multiband vertical.

I would simulate this with EZNEC but I have only the trial version. Maybe I wouldn't need even EZNEC to find out why it wouldn't work if I was smart enough, but I'm not.

Any ideas?

Regards
Juha
OH3NX

2345. Re: Rectification in Alarm System speakers from Beam Antenna--help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000918070511.12654.00000622@ng-fc1.aol.com>
Source record: 180427

>But, does anyone have any more suggestions?
>
>
>--Jeffrey STeinberg, KC2GUC
>

There are two comments

1) Sounds like you are in the near field of the antenna; this is a major problem;
2) CHOKE THE HEXBEAM! I don't know what's on there now, but more beads will only help the choking. Also, choke at additional random lengths along the coax.

73
Chip N1IR

2346. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <rgDGOawEmug4usFTzgj6oALGq31W@4ax.com>
Source record: 180428

"Brett - N7OLQ" <brett.miller_nospam_@intel.com> wrote:

>I'm looking for a new house and a few I'm looking at have high power lines
>not far away. I'm wondering what affects on the various HF or even VHF
>bands the power lines might have. No these are are not so close that my
>antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any
>advice is welcome. Can much of the affect be removed with the right antenna
>type & polarization?
>
>Thanks
>Brett - N7OLQ
>http://N7OLQ.home.att.net/Radio
>
>

I'd pick up a little battery-operated shortwave radio from Radio Shack
or whomever, and take it along when house looking. Then you can listen
for noise at particular locations. Put each ham band in memory, and
zip through the bands, listening for noise.

(Whatever the radio costs, a bad noise problem could be a lot more
expensive to solve.)

Bob
k5qwg

2347. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000918082944.24824.00000227@ng-cc1.aol.com>
Source record: 180429

Otherwise you have hit us all with a barrage of histrionics, meant to anger and incite.

Not my intent. Sorry you don't want to borrow the meter.

73

Rick K1BQT

2348. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <4Znx5.34023$M37.972283@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180430

In a post yesterday, I made the following statement regarding Dr. Cohen:

"VE9SRB" <srbest@worldnet.att.net> wrote in message
news:Kf3x5.2254$Cq6.189543@bgtnsc04-news.ops.worldnet.att.net...
>
>
> In my opinion, you demonstrate a total lack of moral character.
>
> Steve, VE9SRB
>
>

I should not have made this statement on this NG and regret doing so. I apologize to Dr. Cohen for making this statement and for any trouble it may have caused him. I apologize to the participants on this NG for allowing this discussion to degrade to personal statements of this nature. Future posts will be directed at the technical nature of the discussion.

Steve, VE9SRB

2349. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C60E84.769F1BF4@hiwaay.net>
Source record: 180431

Hey Steve- Dont do that. Any small insult to Chip only proves that you are as human as the rest of the group (well, most of it). He has a tendancy to incite the normal ham to total axasperation. You are now a member of a large club- those who think Chip is a total TWIT.

I only wish he and Rick Measures could square off. Now, THAT would be a bout to watch with glee. THey deserve each other.

Bill- W4BSG

VE9SRB wrote:
>
> In a post yesterday, I made the following statement regarding Dr. Cohen:
>
> "VE9SRB" <srbest@worldnet.att.net> wrote in message
> news:Kf3x5.2254$Cq6.189543@bgtnsc04-news.ops.worldnet.att.net...
> >
> >
> > In my opinion, you demonstrate a total lack of moral character.
> >
> > Steve, VE9SRB
> >
> >
>
> I should not have made this statement on this NG and regret doing so. I
> apologize to Dr. Cohen for making this statement and for any trouble it may
> have caused him. I apologize to the participants on this NG for allowing
> this discussion to degrade to personal statements of this nature. Future
> posts will be directed at the technical nature of the discussion.
>
> Steve, VE9SRB

2350. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39C624D0.EAF638EE@dvol.com>
Source record: 180432

"Peter O. Brackett" wrote:

>
>
>
> Fun and easy to build and remarkably effective. Not a contest winning
> antenna set up but great for general all around hamming.
>
> Over the years I have had great success with these "stealthy" easily hidden
> unobtrusive simple all band inverted L configurations.
>
> Peter K1PO
>

I had one for years on a 50 x 100 urban lot, great antenna. 65 feet vertically about 20 feet from the tower in the back yard then 65 feet down to about the 40 foot level to a pole in the front yard. I built a simple (huge) motorized tuner for the thing which was at the base of the vertical run and was able to get a dead flat SWR anywhere between 3.5 and 29Mhz. while sitting on my butt in the shack. The "counterpoise" was simply a pair of 8ft ground rods in eternally damp soil.
>
I didn't win any contests with it but it was *very* competitive on 80 & 40 in the dx contests with modest power. The 80 & 40m portions of my very early 5BDCC were a cakewalk.
>
Brian Kelly w3rv

2351. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000918090044.11356.00000734@ng-cf1.aol.com>
Source record: 180433

>I should not have made this statement on this NG and regret doing so. I
>apologize to Dr. Cohen for making this statement and for any trouble it may
>have caused him. I apologize to the participants on this NG for allowing
>this discussion to degrade to personal statements of this nature. Future
>posts will be directed at the technical nature of the discussion.
>
>Steve, VE9SRB
>

I accept ypur apology. Furthermore, to show my sincerity in this, I will be happy to discuss technical issues here, as time permits. If you can wait a few days, typically, for a reply I will be happy to respond.Needless to say we have other time sinks:-)!

My first comment/concern harps back to the spiral. Perhaps I misread your description, but at least in the context it was presented, it appeared that you placed it within an 1/8 wave by 1/8 wave form factor.

Given that it is in a MUCH smaller--and very electrically small-- form factor (5 inches for 20M wavelength) , I hope you will appreciate that it cannot radiate well, and that if you got a directivity of order 2 dBi, and an impedance of 30 ohms, that neither of these can help you in getting the observables of field strength and radiation resistance.

Steve--such spirals radiate poorly. I know this from experience with very similar designs provided me in the context of 13.56 MHz RF/ID.

If we can get some closure on this we can move to the MI2 "candidates''.

I, too, will keep this a 'ham' conversation and not construe this as some contention between firms.

Nice work on MI2, BTW.

73
Chip N1IR

2352. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c60f03.11492498@news.akorn.net>
Source record: 180434

On Mon, 18 Sep 2000 04:52:37 GMT, Terry Redding <terry@oltraining.com>
wrote:

>Peter, I gather from your comments that Fractal antenna provide a great deal
>of fun off the air and in the NG for those in the know. May be it is rare to
>work a Fractal equipped station? The station I worked clamed to be using a
>two element Fractal quad. He took the time to claim that his small antenna's
>performance was comparable to a full sized quad. Now I wish I had taken more
>time too speak with him about his antenna. This NG has certainly peaked my
>interest in the design.
>
>Terry

Anyone can claim anything Terry.

The truth is, it's hard to tell the difference between a 5dB gain
antenna and a zero dB gain antenna unless signals are marginal or
noise is high.

On ten meters, or even twenty meters, it's pretty easy to work almost
every country available with persistance even with very low ERP. It
takes more time than station.

Taking an all-band country total made over years of time, and then
adding in a few ten meter contacts, is the most misleading kind of
subjective data. It worse than a ten-meter only country total, which
means next to nothing.

73 Tom

2353. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c6108b.11884400@news.akorn.net>
Source record: 180435

On Sun, 17 Sep 2000 18:02:19 -0700, "JerryL" <jlockett@lightspeed.net>
wrote:

>I wonder if he perchance wired the primary for 220, and is only sticking in
>110? Hmmm...
>
>de Jerry

That wouldn't surprize me Jerry.

Here we have Dr. Chip, a self-proclaimed top-of-the-heap antenna
design engineer, not able to measure the output power of his PA.
Instead he asks others how much power he is running.

Pretty strange, isn't it?

73 Tom

2354. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c611bf.12192902@news.akorn.net>
Source record: 180436

On 18 Sep 2000 12:29:44 GMT, k1bqt@aol.com (K1BQT) wrote:

>Otherwise you have hit us all with a barrage of histrionics, meant to anger and
>incite.
>
>Not my intent. Sorry you don't want to borrow the meter.
>73
>Rick K1BQT

If he borrowed the meter, he would have to understand how to use it.
If he understood how to use it, we would have to depend on him telling
the truth.

Even if we got past those two major hurdles, we still don't know what
his site looks like compared to other sites, or how propagation is at
any moment in time.

I suspect this is all a part of his clever trolls Rick, designed to
keep him in the center of the attention.

73 Tom

2355. Re: Antenna for Yaesu 1500M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Wink <wink@rpa.net>
Message-ID: <8q51t20305s@enews3.newsguy.com>
Source record: 180437

You could also construct a simple ground plane antenna using a SO-239
pannel mount connector and metal coat hangers. Solder an 18" piece of
hanger wire to the center post of the connector and attach four 19" pieces
(radials) to the base of the connector. Bend the radials to a 45 degree
angle down from the connector, connect a piece of coax between your radio
and the antenna and ...you're on the air!

Gary / N2UM

PS Don't forget to sand off the coating off the hanger wire ends so that
you get a good electrical connection.

"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:39c41958$0$1343$45beb828@newscene.com...
> Got the same radio. Use it at home and in the car.
>
> Here is what I did at home. I am about 20 miles from one repeater and 25
from
> another. I get full quieting in with 50 watts.
>
> I bought a small larsen 2m/440 antenna (NMO mount) and a mag mount. The
> antenna is about 18" tall with a buldge in the middle (not sure what it
does).
> It looks like a big cell phone antenna.
>
> I mounted the mag mount on a safe in my attic. You could mount it onto
A/C
> ducts or even a cookie sheet on the floor. A little RG-8X and I am on the
> air, full quieting to the repeater.
>
> Total antenna setup: about $40. No need for a fancy antenna. SWR,
measured
> with an MFJ analyzer is less than 2:1 on the repeater frequencies, and is
> usually 1.5:1.
>
> --jeffrey
>
> In article <ss784hglh3t118@corp.supernews.com>,
> nospam-rallythesheep@crosswinds.net says...
> >
> >What kind of antenna should I get for a
> >Yaesu 1500M? This is a 2M radio and would
> >be a base station, not a mobile.
> >
> >~Rally The Sheep

> >nospam-rallythesheep@crosswinds.net
> >
> >Remember.......If the world didn't suck, we'd all fall off.
> >
> >(When replying, remove "nospam-" from the email address
> >above)
> >
> >
>

2356. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c612f0.12497987@news.akorn.net>
Source record: 180438

On 18 Sep 2000 05:23:16 GMT, fractenna@aol.com (Fractenna) wrote:

>Thomas Rauch, W8JI, has continually made every effort to lie, harass, and even
>threaten me. Last week he posed a death threat on this NG against me. I am in
>serious fear of this person and have taken the proper steps to protect myself
>and my family, which even included certain understated precautions here at the
>open house.
> Two weeks ago I canceled a public ham talk in Portland, Maine, because he
>made public assertions that he would be present, and I was not given sufficient
>information how my safety could be assured. It is exactly W8JI's bizarre and
>threatening behavior that made me promise my wife that I would not give ANY
>MORE public talks to ham radio operators.
>Understand what this means: someone who has championed and pioneered a new
>technology--of great interest to hams-- will NO LONGER speak to hams publicly.
>Imagine the kind of unrelenting harassment by W8JI and others that forces
>someone to make such a decision!!
>One of the actions includes initiating the process of civil suit against Mr.
>Rauch in his home state of Georgia.
>Nathan Cohen, Ph.D.

Don't blame your emotional instablity and unpopularity on me!!!

73 Tom

2357. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c61607.13288832@news.akorn.net>
Source record: 180439

On Mon, 18 Sep 2000 03:18:54 -0500, Mark Keith <nm5k@wt.net> wrote:

>Bill Aycock wrote:
>>
>> Did I miss something again-? I thought I had read everything posted
>> here, and I do NOT remember a death threat. I'm sure I would have
>> remembered one if it was from Tom, or any of the regulars. I remember
>> when Chip dodged the club meeting, and I remember all his talk about
>> police at the "open house", but not anything serious.
>>
>> Can someone give me the date and time, so I can read it for myself?
>>
>> Bill-W4BSG
>
>Knowing his past histronics on the subject in the past, I don't even
>bother looking any more. No telling what required the police at the
>frectal party... They may have him under surveillance...:/ MK
>--
>http://web.wt.net/~nm5k

A few weeks ago it was K1BQT that "threated his life". It's my turn
this week.

2358. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c618d6.14007663@news.akorn.net>
Source record: 180440
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

On Sun, 17 Sep 2000 22:39:20 -0600, "Brett - N7OLQ"
<brett.miller_nospam_@intel.com> wrote:

>I'm looking for a new house and a few I'm looking at have high power lines
>not far away. I'm wondering what affects on the various HF or even VHF
>bands the power lines might have. No these are are not so close that my
>antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any
>advice is welcome. Can much of the affect be removed with the right antenna
>type & polarization?
>
>Thanks
>Brett - N7OLQ
>http://N7OLQ.home.att.net/Radio

Hi Bret,

It depends on what you like to do,and how those lines are installed
and maintained. If you like low band DXing, I wouldn't chance it.
I've had problems from lines a couple miles away.

If you only work 40 meters and up, you are probably OK.

Just remember if you have a problem, it can be next to impossible to
get it resolved.

73 Tom

2359. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: JerryL <jlockett@lightspeed.net>
Message-ID: <o4px5.10381$is5.557800@nntp1.onemain.com>
Source record: 180441

>>that made me promise my wife that I would not give ANY
> >MORE public talks to ham radio operators.

> >Nathan Cohen, Ph.D.

So, instead of any more talks, I'll just hold an open house and invite them
all to my home!!! Geeze, what a flake!!!

de Jerry...NPh.D. (Non Ph.D.)

2360. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8q58lo$176$1@slb0.atl.mindspring.net>
Source record: 180442

Thread:

There were no threats that I recall, least of all "death threats", in any of the postings to the "open house" threads that I observed.

However, it may have been me that Chip is refering to and not Tom, since I jokingly referred to protecting and arming myself if I were to attend.

Since...

Immediately after Dr. Cohen mentioned in a post that the police would be there at the open house, I was totally surprised by the mention of police, and so... I opined in a subsequent posting that perhaps if I were to attend, I should wear a kevlar vest and carry my .357 for protection.

There were no threats posted to the NG that I recall seeing.

In fact, although I was in beantown on business last weekend, my dear wife advised me not to attend the open house out of fear of altercation caused by actions of Dr. Cohen. My wife often reads this NG over my shoulder and she is of the opinion that Dr. Cohen apparently suffers from paranoia and she opined that sometimes such sufferors might inadvertenly take actions that could harm innocent bystanders.

I wisely chose to take her advice and stayed away from the open house.

But... "death threats", I don't know where that idea came from???

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Tom W8JI <2w8ji@contesting.com> wrote in message
news:39c61607.13288832@news.akorn.net...
> On Mon, 18 Sep 2000 03:18:54 -0500, Mark Keith <nm5k@wt.net> wrote:
>
> >Bill Aycock wrote:
> >>
> >> Did I miss something again-? I thought I had read everything posted
> >> here, and I do NOT remember a death threat. I'm sure I would have
> >> remembered one if it was from Tom, or any of the regulars. I remember
> >> when Chip dodged the club meeting, and I remember all his talk about
> >> police at the "open house", but not anything serious.
> >>
> >> Can someone give me the date and time, so I can read it for myself?

> >>
> >> Bill-W4BSG
> >
> >Knowing his past histronics on the subject in the past, I don't even
> >bother looking any more. No telling what required the police at the
> >frectal party... They may have him under surveillance...:/ MK
> >--
> >http://web.wt.net/~nm5k
>
> A few weeks ago it was K1BQT that "threated his life". It's my turn
> this week.

2361. Re: NEC4 Model of Helically Wound Loop Re: MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <1kqx5.20259$6f1.987201@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180443

In a post Friday, Dr. Cohen made the following statements regarding my NEC4 analysis and the helically wound loop previously proposed as a small form factor design in the thread : $1000 Fractal Antenna Challenge.

>>> Dr. Cohen:
"He is clearly wrong. For anyone to say this, they cannot have a good handle on
understanding:

* mutual coupling;
* resonance;
* ohmic loss;
* radiation resistance;
* field strength.

Using words like 'directivity' and 'impedance' are cop outs that deliberately
avoid issues such as field strength and efficiency. I have no idea why someone
who claims to do antenna work would use NEC4 to get directivity rather than field strength, or quote an impedance rather than a radiation resistance (at the current max).

Field strength is the salient observable.
>>>

I use NEC4 to calculate directivity and impedance data simply because these represent the antenna characteristics in an ideal state. It is the logical place to start describing the antenna's performance. Practical deviations from this ideal state are numerous and include many factors such as ohmic losses in the wire, ground losses, SWR mismatch loss, matching network losses, dielectric losses (if the antenna if fabricated on a substrate), pattern degradation due to the surrounding environment, etc, etc., etc.

In my opinion, comparing the performance of the MI2 loop and another design in the ideal state (directivity and impedance) is valid because, for the most part, the practical limitations on the performance of each design is the same. The MI2 Loop and the Random Loop design both have the exact same wire length, wire diameter and aperture size. Radiation efficiency is simply a function of the ohmic losses in the wire and the radiation resistance. If both antennas have a similar feedpoint impedance, concerns regarding how the ohmic losses in the wire impact field strength (efficiency) are irrelevant.

>>> Dr. Cohen:
I remind everyone that this person formally told us that he had a 20

turn spiral that had better 'directivity' than MI2. Of course it has a far lower field strength because it uses 4 to 5 times the amount of wire!"
>>>

As for the previously defined helically wound antenna, Dr. Cohen is simply incorrect when he states that my proposed design has 4 to 5 times the amount of wire compared to the MI2 Loop.

>>> Dr. Cohen:
Given that it is in a MUCH smaller--and very electrically small-- form factor
(5 inches for 20M wavelength) , I hope you will appreciate that it cannot radiate well, and that if you got a directivity of order 2 dBi, and an impedance of 30 ohms, that neither of these can help you in getting the observables of field strength and radiation resistance.
>>>

First, if we model an antenna in NEC4 with zero wire loss, then the calculated feedpoint resistance is the antenna's radiation resistance (RR). Determining the loss resistance (RL) is simply a function of the ohmic losses in the wire. If we know the radiation resistance and the loss resistance, efficiency is easily determined from RR/(RR+RL). If two antennas have the exact same ohmic loss and similar radiation resistance, this discussion is irrelevant.

All issues on pattern shape and polarization aside, a helically wound design will not "radiate well" if it has a high loss resistance compared to it's radiation resistance. A low efficiency will typically occur under two conditions: 1) When the wire length is much smaller than the wavelength the radiation resistance will be low and the loss resistance will be a significant factor. 2) When an excessive amount of wire is used to fabricate the antenna, the loss resistance increases and becomes a significant factor.

A new helically wound design has been modeled in NEC4 under the following conditions - that it have the same wire length as the previously modeled MI2 Loop, the same wire diameter and the same aperture size. The helically wound antenna consists of a total of 64 turns (16 turns on each perimeter side) formed into a square loop having the same outside perimeter as the MI2 loop. The helical winding diameter is 5 inches. The pitch length per turn is about 4.95 inches on two sides of the perimeter and about 6.9 inches on the other two sides.

Note that I did not get the wire length and number of segments exactly the same as the MI2 because of the even number of turns in the helical winding sections.

Results are as follows:

MI2
Helical

Total Wire Length: 27.56 m 27.96 m
Number of Segments in Model: 500 548

1st Resonant Frequency (MHz) 15.749 17.657

Resonant Resistance (ohms) 28.4 47.9

Directivity (dBi) 2.14
2.31

2:1 SWR bandwidth on 50 ohms: 1.27% 2.83%

3rd Resonant Frequency (MHz): 28.65 33.35

Resonant Resistance (ohms): 19 39.2

Directivity (dBi): 4
3.91

Note that the feedpoint for the helical antenna was located in the center of one helical arm. If I move the feedpoint to a corner where a straight wire joins the helical elements, the first resonance changes to 17.83 MHz and 80.8 ohms. Note also that MI2 values change with moving feedpoint as well.

Note that lowering the resonant frequency of the helical design requires additional wire in the helical sections. However, lowering the resonant frequency to match that of the MI2 will not require 4 - 5 times the amount of wire.

If there is a question as the validity and accuracy of the NEC model with this configuration, I am open to discussion and correction as necessary.

Thanks for your time and patience in this one.

73
Steve, VE9SRB

2362. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C6356B.121F52AB@bigfoot.com>
Source record: 180444

Brian Kelly wrote:
> ... are you saying that any decent 1:1 balun/choke can transform
> the balanced feedline with an R(x) + j(y) impedance into an unbalanced
> feedline with an R(x) + j(y) feedpoint impedance no matter what? Or what?

Mainly, "Or what?" I avoid the super high SWRs by making my dipoles 1/2WL at the lowest frequency of operation. In general, that limits the impedances encountered to a donut on the Smith Chart with SWR limits between 4.5:1 and 18:1 for 450 ohm line. I then install the 1:1 balun/choke at the current maximum point, i.e. zero reactance point. Thus, my 1:1 balun/choke sees a resistive impedance between 25 ohms and 100 ohms and functions accordingly. Conceptually, instead of bringing the balun to the antenna, I bring the antenna to the balun.

> The MFJs do have "baluns" and "open-line terminals" you can
> switch in and which supposedly properly feed balanced lines via their 1:1
> baluns. What's getting lost in the shuffle/losses if anything??

A lot of the MFJs use 4:1 voltage baluns which don't attempt to balance the currents. The main function of a T-Line balun is to minimize common-mode currents both on the coax side and on the balanced side. A balun operated far away from its design parameters will not perform that function very well. It's probably fairly uncommon for baluns to experience appreciable heat losses. The losses are generally of the nature of RF that doesn't make it to the antenna because of current imbalance. Some people don't consider unwanted feedline radiation as losses. I do.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2363. Re: Stupid question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C6378E.642ABD05@bigfoot.com>
Source record: 180445

Juha wrote:
> If we have a G5RV multiband dipole and the matching to a 50 ohm
> output transmitter coax is handled with a specific length of 300-450 ohm
> ladder line, can we apply the same matching approach to a vertical antenna?

The G5RV is a balanced antenna and the matching section is balanced.
IMO, it is virtually impossible to balance the currents on a matching
section of balanced line used with a vertical and ground radials.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2364. WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: jason_hsu@my-deja.com
Message-ID: <8q5gspqav1@nnrp1.deja.com>
Source record: 180446
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

My ground floor apartment is VERY RF-unfriendly. Even with my trusty ADI/Premier RD-98 antenna (a long, flexible 2m/70cm antenna for HTs), I need to use the roof of my car parked outside as a ground plane in order to transmit into the local repeater (which is a good 15 miles away).

Should I buy the $10 telescoping antenna that Radio Shack sells for 2m/70cm? It is quite cheap, and it should perform better than the flexible antenna when fully extended. A telescoping antenna is fragile, but I can still use the flexible antennna away from home.

Would it be possible for me to use a mobile antenna with my HT? (If so, I realize I would probably need to buy special adapters as well.)

Are there other options? A dipole? A wire? A small base station 2m/70cm antenna?

Should I select a 6m/2m/70cm antenna? In a few years, I might buy an HT that gets 6m or an HF rig that gets 6m/2m/70cm (like the Icom 706MKIIG or Yaesu FT 847).

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com http://www.deja.com/
Before you buy.

2365. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C6492F.518C@wt.net>
Source record: 180447

VE9SRB wrote:

> I should not have made this statement on this NG and regret doing so. I
> apologize to Dr. Cohen for making this statement and for any trouble it may
> have caused him. I apologize to the participants on this NG for allowing
> this discussion to degrade to personal statements of this nature. Future
> posts will be directed at the technical nature of the discussion.
>
> Steve, VE9SRB

No problem. We know it wasn't your fault that you were led to that
conclusion. MK
--
http://web.wt.net/~nm5k

2366. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,cohe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e23bed.432722121@news.seanet.com>
Source record: 180448

On Sun, 17 Sep 2000 13:47:04 GMT, klocko@toad.net wrote:

>> 2) In the case of a small self- resonant loop--such as MI2--the field
>strength
>> and radiation resistance is incredibly sensitive to the geometry. It
>has
>> nothing to do with 'origin symmetry' and ''length of the wire'.
>
>Incredibly sensitive to the geometry? Do you really want to say that?
>That statement makes me want to stay as far away as possible from the
>MI2. To me, that means if there's an error in a length of a conductor or
>an angle between two conductors, then I can't count on the radiation
>resistance being anywhere close to what I want.
>

Hi Bill,

There are some implementations of fractals that are susceptible to variations. One remarkable instance is my replication of the k2 that proved to be better than the original.

The original proved to be not so fully optimized as my replica and barely better than the simple Flying H that I designed that easily replaces either.

In another thread, Larry N0SA offers that he had a terrible time in building a fractal. Which one remains a mystery, in all likelihood it was the k2 or the Flying H (possibly the low Fractalope). Either show a very great variability in performance in relation to the proximity of earth. I included such instances as a service for those who cannot find elevation. Unfortunately, these Fragile Antennas require a considerable amount of hand-holding.

Some of these small fractal designs offered require the loss of earth (as they snuggle up to its deadly embrace) to offer a single unique characteristic while sacrificing every other characteristic by pouring power into the ground. The single characteristic's relation to ground proved to be intensely variable over the elevation variation of several centimeters! Imagine, a slight breeze could easily drive your SWR through the roof as the 'tenna sways. The k2 and its ilk prove to be the poorest "practical" design offered in a long time.

However, with any (this includes fractals) antenna, well away from ground (more than several centimeters), such variability rapidly drops away with increasing distance from ground. Note, there is nothing

remarkable nor fractal-like in any of this as the Flying H easily proves, it too employs the same ground "optimization." ;-)

Some may be confused by these shallow claims of a strict requirement for zero tolerance in geometry variation, especially when the fully qualified statement is split by over 100 postings across innumerable threads. For those who face such claims, if you are offered advice that a design is intensely linked to a rigid necessity of dimension, then you have an instance from Fragile Antennas. Surely a wonder in the lab, but as Larry N0SA has noted - a bitch to build and operate.

For those who wish to investigate practical fractal designs, my temporary page at:
http://www.seanet.com/~rwclark/fractal/Practical%20Designs.htm
offers some ideas. Over this weekend there were something over a hundred visits to the Fractalope alone.

Be advised that this design is the basic element, myself I would prefer the InVfracV which shows considerable gain over the other variants in the high band. However, it should also be noted that one variant will perform better than others depending upon band. That is, the FracT is considerably better in the low bands, but most designers will note that these variations on a theme simply reflect the reality of antenna design in general. There is no magic shape nor is there any panacea involved.

Be further advised that the maker of Fragile Antennas has condemned the data found in my pages - especially those pages that replicate many of these Fragile offerings as demonstrated by identical performance valuations to the original design. The implication of this condemnation is ironically reflective: condemning the original to damn the replica. As I offer EZNEC files for all correspondents to observe these issues for themselves, these aspersions are simply more instances in Fragile Antenna's kulture of denial.

73's
Richard Clark, KB7QHC

2367. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000918135636.12416.00000028@ng-ff1.aol.com>
Source record: 180449

>I suspect this is all a part of his clever trolls Rick, designed to keep him in the center of the attention.<

I wouldn't worry about the "death threat" troll, either, Tom. According to the FBI, anyone is entitled to articulate any hysterical fear they wish (even Chicken Little). The agent went on to say that charges such like these are generally so easy to disprove, they'll likely never cause a problem for you in the future.

By putting it on the public record, however, they may cause a problem for themselves down the road.

73

Rick K1BQT

2368. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5p3i$8l5$1@iac5.navix.net>
Source record: 180450

As you know in most cases, I am anything other than a fractenna supporter. I will have to say that he has probably worked pretty hard for his position on the DXCC list. I have listened to him operate on 10 meters and he is a skilled operator.

In most other things in life he is a total putz, however as a DX operator I do have to throw kudos his way.

--

Fred W4JLE
http://w4jle.com/

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message news:8q3c77dpb1@nntp9.atl.mindspring.net...
> Roy:
>
> Apparently only Ph.D.'s and such are impressed by DXCC.
>

2369. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5p8i$8lm$1@iac5.navix.net>
Source record: 180451

Anecdotal evidence at best, how could he possibly know unless he had the other antenna available to A?B test.

--

Fred W4JLE
http://w4jle.com/

"Terry Redding" <terry@oltraining.com> wrote in message news:39C59F91.2ED83A86@oltraining.com...
The station I worked clamed to be using a
> two element Fractal quad. He took the time to claim that his small antenna's
> performance was comparable to a full sized quad

2370. Where to get or how to make Capacitance top hat for a screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <wLtx5.3325$Ao3.17929@news1.atl>
Source record: 180452

Hi,
The title is my question? Please email any ideas. I am trying to do this cheaply. Thanks,

--
73's from W4BEN,
Benjamin Blavat

2371. Re: Vert. HF ? How Good?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8q5q9v$6co$1@nnrp1.deja.com>
Source record: 180453

I reguarly use a dipole that is literally draped over the tree branches below my balcony. The untuned SWR on the dipole is 1.3:1. I run QRP and up to 50W. I have WAS and all over the world with good signal reports. The wire on the dipole is just insulated lamp wire. I have noted better signal reports from other horizontal antennas like inverted V's, and beams than with verticals, but I think that's only because we're polarized the same way rather than any deficiency with vertical antennas.
Just my 2 cents, your mileage may vary.

In article <8oveogmv1@nnrp1.deja.com>,
rattlehead@my-deja.com wrote:
> I am having space problems in my yard mostly due to trees... so
> antennas that consume a lot of horizontal space, such as HF inverted V's
> and dipoles, are difficult to use because I feel the trees would cause
> too many SWR headaches in tuning them (the wires would have to pass near
> tree branches, no matter where I arranged them).
> so my question is this: I KNOW that the verticals can't perform as well
> as the dipoles and V's on HF, but do they work well enough to give them
> a try? or should I just bite the bullet and put up a dipole or V and
> just use a tuner to solve the SWR problems?
>
> --
> "As flies to wonton boys are we to the gods;
> they kill us for thier sport."
> -- 'Brave New World'
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2372. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5pfs$8q9$1@iac5.navix.net>
Source record: 180454

Anything works on ten meters, see QST a couple of months ago. There was a guy that worked WAC on 10 with a lightbulb mounted on a post. He had the coax choked so the only radiation was from the bulb and said it only took him 1 or 2 calls to get through. Almost identical to the fractal claims.

--

Fred W4JLE
http://w4jle.com/

"Dino" <dinod@deltanet.com> wrote in message
news:XTgx5.175896$6y5.105760747@news2.rdc2.tx.home.com...
> Maybe not, but the antenna works...and you can't argue that.
>
>

2373. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5pt8$914$1@iac5.navix.net>
Source record: 180455

He certainly gave you the sense of being there during the blitz and the
battle of Britain. Also claimed a spot in history as the first to publicly
attack Joseph McCarthy.

--

Fred W4JLE
http://w4jle.com/

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:3208-39C57B79-21@storefull-113.iap.bryant.webtv.net...
> Ed was probably as good as there ever was. I remember his vivid word
> pictures from London during the WW-2 air war over Britain.
>

2374. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5q2j$92e$1@iac5.navix.net>
Source record: 180456

You have validated my Fathers favorite phrase. Years ago in my youth I recall him stating "Everyone on earth has a purpose, even if only as a bad example"

--

Fred W4JLE
http://w4jle.com/

"Dino" <dinod@deltanet.com> wrote in message news:Psgx5.175832$6y5.105705937@news2.rdc2.tx.home.com...
> From what I've read, he has opened the debate forum to discuss new
> ideas. He has people thinking. I've seen you debate him Tom which
> is proof that he has people thinking and talking. Conversation is
> good and harbors new and better ideas! Look at PSK31!
>
> Dino
>
> >Hi Dino, can you tell me what he is doing that is good for the amateur
> >community?
> >
> >Just an example please.
> >
> >73 Tom
>

2375. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q5q9e$94f$1@iac5.navix.net>
Source record: 180457

The sky is falling... The sky is falling...
said Chicken Little
--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message
news:20000918012316.23447.00000143@ng-fl1.aol.com...
> Thomas Rauch, W8JI, has continually made every effort to lie, harass, and
even
> threaten me. Last week he posed a death threat on this NG against me. I am
in
> serious fear of this person and have taken the proper steps to protect
myself
> and my family, which even included certain understated precautions here at
the
> open house.

2376. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,cohe

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8q60f6ebh1@nnrp1.deja.com>
Source record: 180458

In article <39e23bed.432722121@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> Some may be confused by these shallow claims of a strict requirement
> for zero tolerance in geometry variation, especially when the fully
> qualified statement is split by over 100 postings across innumerable
> threads. For those who face such claims, if you are offered advice
> that a design is intensely linked to a rigid necessity of dimension,
> then you have an instance from Fragile Antennas. Surely a wonder in
> the lab, but as Larry N0SA has noted - a bitch to build and operate.

Hi Richard,
Excellent post - very informative. My first impression on reading of the incredible sensitivity was that the statement was a huge (keyboard) blurt. I still think that's what it is. And there was no qualification to modify it. Such a characteristic is certainly nothing to brag about.

> For those who wish to investigate practical fractal designs, my
> temporary page at:
> http://www.seanet.com/~rwclark/fractal/Practical%20Designs.htm
> offers some ideas. Over this weekend there were something over a
> hundred visits to the Fractalope alone.
>
> Be advised that this design is the basic element, myself I would
> prefer the InVfracV which shows considerable gain over the other
> variants in the high band. However, it should also be noted that one
> variant will perform better than others depending upon band. That is,
> the FracT is considerably better in the low bands, but most designers
> will note that these variations on a theme simply reflect the reality
> of antenna design in general. There is no magic shape nor is there
> any panacea involved.
>
> Be further advised that the maker of Fragile Antennas has condemned
> the data found in my pages - especially those pages that replicate
> many of these Fragile offerings as demonstrated by identical
> performance valuations to the original design. The implication of
> this condemnation is ironically reflective: condemning the original to
> damn the replica. As I offer EZNEC files for all correspondents to
> observe these issues for themselves, these aspersions are simply more
> instances in Fragile Antenna's kulture of denial.

I'll definitely visit your web site, but I won't be doing any building.
vy 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2377. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c6831a.41215847@news.akorn.net>
Source record: 180459

On Mon, 18 Sep 2000 10:31:55 -0500, CAM <cam2338@bigfoot.com> wrote:

>A lot of the MFJs use 4:1 voltage baluns which don't attempt to balance
>the currents. The main function of a T-Line balun is to minimize common-

Those old baluns are the result of the old way of thinking that baluns
need to be 4:1. Most of that is changing now.

>mode currents both on the coax side and on the balanced side. A balun
>operated far away from its design parameters will not perform that
>function very well. It's probably fairly uncommon for baluns to experience

1:1 Choke baluns "care less" what the differntial mode impedance is,
as long as the wire doesn't melt or arc. You can, if you reach
impedances of a few thousand ohms, run into problems. Below that value
it's pretty easy to make a 1:1 choke balun work. No so with a 4:1 and
especially a 9:1 balun.

Even if you play with feeder length to limit differential mode
impedance, it is no guarantee you've changed the common mode impedance
favorably. In most installations common mode impedances are somewhat
moderated compared to differential mode impedances.

I'd always use a 1:1 choke type balun.

73 Tom

2378. Re: WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <39C67978.217B4B30@dialpoint.net>
Source record: 180460
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

If the antenna has to be inside you might want to try a homemade ground plane hanging from the cealing. There are several ways you can go about this. Just strip about 19 inch of the shield of the coax off. Then find some stiff wire that you can hook to the shield at this point and bend about 3 or 4 pieces at an angle of 45 deg. to the ground.

Some have used magnetic mounts for the mobiles and put them on the top of a refrigerator or other mass of metal.

If you can get to the outside, then you can use any antenna that is made for the bands you want to use. Just because you have a handheld you are not limiated to a whip that is attached to it, but you can use any antenna type that you want to.

jason_hsu@my-deja.com wrote:
>
> My ground floor apartment is VERY RF-unfriendly. Even with my trusty
> ADI/Premier RD-98 antenna (a long, flexible 2m/70cm antenna for HTs), I
> need to use the roof of my car parked outside as a ground plane in
> order to transmit into the local repeater (which is a good 15 miles
> away).
>
>
> Would it be possible for me to use a mobile antenna with my HT? (If
> so, I realize I would probably need to buy special adapters as well.)
>
> Are there other options? A dipole? A wire? A small base station
> 2m/70cm antenna?
>
>

2379. Re: NEC4 Model of Helically Wound Loop Re: MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c6858c.41841987@news.akorn.net>
Source record: 180461

On Mon, 18 Sep 2000 15:15:09 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>In a post Friday, Dr. Cohen made the following statements regarding my NEC4
>analysis and the helically wound loop previously proposed as a small form
>factor design in the thread : $1000 Fractal Antenna Challenge.
>
>>>> Dr. Cohen:
>"He is clearly wrong. For anyone to say this, they cannot have a good handle
>on
>understanding:
>
>* mutual coupling;
>* resonance;
>* ohmic loss;
>* radiation resistance;
>* field strength.
>
> Using words like 'directivity' and 'impedance' are cop outs that
>deliberately
>avoid issues such as field strength and efficiency. I have no idea why
>someone
>who claims to do antenna work would use NEC4 to get directivity rather than
>field strength, or quote an impedance rather than a radiation resistance (at
>the current max).
>
>Field strength is the salient observable.
>>>>

Steve,

It's became very plain that Dr. Chip misunderstands the use of
"radiation resistance".

There was quite a long thread on this, where he stood alone with his
opinion. No amount of reference material was good enough. Dr. Chip
said Kraus and others didn't know what they were doing, or that they
were "waffeling".

When he uses that term, he means the resistance at a current maxima in
the syatem, regardless of how many other current maxima's there are.

For example, he would consider the radiation resistance of a folded
dipole four times that of a conventional dipole without apparent
regard to the fact loss resistance when normalized to the same point
in the system and using the same step-up ratio would be four times

higher.

He also only considers FS at the maximum point "important" and somehow
equates that to "efficiency".

I hope understanding how he uses the terms will help you understand
what he is saying. I'll try to offer shortcuts for you, so you don't
have to spend weeks out what he is trying to say.

>In my opinion, comparing the performance of the MI2 loop and another design
>in the ideal state (directivity and impedance) is valid because, for the
>most part, the practical limitations on the performance of each design is
>the same. The MI2 Loop and the Random Loop design both have the exact same
>wire length, wire diameter and aperture size. Radiation efficiency is
>simply a function of the ohmic losses in the wire and the radiation
>resistance. If both antennas have a similar feedpoint impedance, concerns
>regarding how the ohmic losses in the wire impact field strength
>(efficiency) are irrelevant.

Not in all cases. It depends on how the losses are distributed in the
systems. Different antennas with similar feedpoint resistances and
conductors can have greatly different losses.

>>>> Dr. Cohen:
>Given that it is in a MUCH smaller--and very electrically small-- form
>factor
>(5 inches for 20M wavelength) , I hope you will appreciate that it cannot
>radiate well, and that if you got a directivity of order 2 dBi, and an
>impedance of 30 ohms, that neither of these can help you in getting the
>observables of field strength and radiation resistance.

I'm puzzled by the 5 inch + 1/8 wl at twenty meters statement. What is
he saying??????

>>>>>
>
>First, if we model an antenna in NEC4 with zero wire loss, then the
>calculated feedpoint resistance is the antenna's radiation resistance (RR).
>Determining the loss resistance (RL) is simply a function of the ohmic
>losses in the wire. If we know the radiation resistance and the loss
>resistance, efficiency is easily determined from RR/(RR+RL). If two
>antennas have the exact same ohmic loss and similar radiation resistance,
>this discussion is irrelevant.

Those losses have to be normalized to the point where radiation
resistance is taken, otherwise they are meaningless. The formula
Rr/(Rr+Rloss) only works when the resistances are normalized to the
same point in the system by whatever "transmission line" effects are
involved in the antenna. If the antenna had uniform current
distribution, then that formula would work without normalizing the
resistance loss to the point where radiation resistance was taken.

>conditions: 1) When the wire length is much smaller than the wavelength the
>radiation resistance will be low and the loss resistance will be a
>significant factor.

I think what you mean there is spatial area is small compared to the
wavelength. Ten feet of wire in a one foot area does not have the
radiating efficiency of ten feet of wire occuplying ten feet of
spatial area.

>A new helically wound design has been modeled in NEC4 under the following
>conditions - that it have the same wire length as the previously modeled MI2
>Loop, the same wire diameter and the same aperture size. The helically
>wound antenna consists of a total of 64 turns (16 turns on each perimeter
>side) formed into a square loop having the same outside perimeter as the MI2
>loop. The helical winding diameter is 5 inches. The pitch length per turn
>is about 4.95 inches on two sides of the perimeter and about 6.9 inches on
>the other two sides.

I would expect that to work more or less about the same as an antenna
with sharp zig-zags, or better. Sharp bends have no special magic over
gradual curves.

>Results are as follows:
>
> MI2
>Helical
>
>Total Wire Length: 27.56 m 27.96 m
>Number of Segments in Model: 500 548
>
>1st Resonant Frequency (MHz) 15.749 17.657
>
>Resonant Resistance (ohms) 28.4 47.9
>
>Directivity (dBi) 2.14
>2.31
>
>2:1 SWR bandwidth on 50 ohms: 1.27% 2.83%
>
>
>3rd Resonant Frequency (MHz): 28.65 33.35
>
>Resonant Resistance (ohms): 19 39.2
>
>Directivity (dBi): 4
>3.91

What happens when you add wire losses?

73 Tom

2380. Re: Where to get or how to make Capacitance top hat for a screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C69792.A9D42CDE@oio.net>
Source record: 180462

Benjamin Blavat wrote:
>
> Hi,
> The title is my question? Please email any ideas. I am trying to do this
> cheaply. Thanks,
>
> --
> 73's from W4BEN,
> Benjamin Blavat

Ben,
I guess it depends on how large of a capacitance hat you
need. One, two or three stiff wires radiating from the coil
whip junction will work. Vary the length of the wires to
change capacitance, or add a few more.
You can use, pie plates, pizza pans, etc, just up to your
imagination (and what the 'significant other' will put up
with.
'Doc

2381. FS: US Tower TX472MDPL

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: AA8PA <aa8pa@wnol.net>
Message-ID: <6Nwx5.42430$Uo6.40663@dfw-read.news.verio.net>
Source record: 180463

US Tower TX472 MDPL with limit switches
CX-4 Coax standoff arms
TB-2US Thrust bearing
TRX-80HD Raising feature
20' galv mast

Complete package $2,500

Located in Michigan, purchaser must make arrangements for pickup and shipping

If interested call (248)696-3197 days or email to aa8pa@wnol.net

ed

2382. FS: Comtek 80m Hybrid Coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: AA8PA <aa8pa@wnol.net>
Message-ID: <kOwx5.42431$Uo6.41072@dfw-read.news.verio.net>
Source record: 180464

I have for sale a Comtex 80m hybrid coupler for $200.

Call (248)696-3197 or email to aa8pa@wnol.net

ed

2383. FS: Comtex 80m hybrid coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: AA8PA <aa8pa@wnol.net>
Message-ID: <LTwx5.42438$Uo6.41111@dfw-read.news.verio.net>
Source record: 180465

I have for sale a Comtex 80m hybrid coupler for $200 plus shipping

Call (248)696-3197 or email to aa8pa@wnol.net

ed

2384. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C6A65C.33E1350@oltraining.com>
Source record: 180466

That is always my approach. It is the reason I now wish I had pursued his experience with the Fractal Two Element Quad. I may have missed a rare opportunity.

Terry - W6LMJ

W4JLE wrote:

> Anecdotal evidence at best, how could he possibly know unless he had the
> other antenna available to A?B test.
>
> --
>
> Fred W4JLE
> http://w4jle.com/
>
> "Terry Redding" <terry@oltraining.com> wrote in message
> news:39C59F91.2ED83A86@oltraining.com...
> The station I worked clamed to be using a
> > two element Fractal quad. He took the time to claim that his small
> antenna's
> > performance was comparable to a full sized quad

2385. Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: Frazier <frazier@flex.com>
Message-ID: <39C6B6C9.94754706@flex.com>
Source record: 180467

I'm located on the big island of Hawaii, and desire improvement of my MW (AM radio) reception. Since I fairly recently moved here, I've not had much chance to take the time to upgrade my ticket, so am not operating on the HF bands.

This message, however is for the purpose of increasing reception of american AM stations, both reasonably local, and from the mainland of North America.

Cost is a big issue, so I need to keep the costs down.

I live on a 1.6 acre parcel, with a two story house (sith about 2600 Square feet of sheet steel roofing). There is ample room for a pretty long wire to the north or west, some to the south, but almost none to the east or northeast.

First choice is to improve reception towards the north or northwest (around or over the volcano) for Honolulu stations. (The big island of Hawaii is the southern-most island of the Hawaiian chain) Second choice would be to improve reception of stations on the mainland, which is east-northeast from here...

A tuned loop might fill the bill, but I'm not too sure where to look first. Most of my listening is after dark here, so day time reception isn't as much an issue.

I'm using a commercial HF transceiver as one receiver (Signal One) and a Sangean ATS-909 portable (which also has an external antenna jack).

I'd appreciate any ideas on what path to take...

-- Rick, KD6QZD

2386. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C6BCF9.7344E76A@oio.net>
Source record: 180468

Rick,
First, let me say that you live in a terrible spot for MW DX'ing,
and I think you should trade places with me!
If that won't 'fly', then let me say you have a number of very nice
options. If it is at all possible, I'd take advantage of that metal
roof with a vertical of some kind. Or, you might try for an 'over the
pole' long wire(s). If trees are situated right, you could try
directive
arrays, wire beams, etc. There is no 'best' antenna, just antennas
that work well for your location and ($).
If all this gets to be too much for you, I'll leave the 'trade'
option open....
'Doc

2387. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:08:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q3mftciv1@uranium.btinternet.com>
Source record: 180502

Dear Peter, I'm afraid your sort of reaction is a common occurrence - if I'm not wholely with you then I must be your enemy.

People should be more certain of their motives - after experiencing disappointment in one direction they should try not to vent their aggression on the next imaginary victim who exposes himself. (Now THERE's an opportunity for sex-deprived contributors.)

I am not anybody's second. Neither am I a character assassin. I try to give credit where credit is due. And I may be an iconoclast when pompous icons are concerned. Technical icons.

But most times I just let things pass when they become personal. It was probably a mistake responding to your suggestion and question.
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Peter O. Brackett wrote -
> Reg:
>
> Surely you are not a second in the fractal corner!
>
> How would you characterize yourself, are you just a ringside spectator, or
> an active iconoclast?

2388. Re: Suggestions for a Stealth Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:34:30 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39C56216.C3D7FC25@bellatlantic.net>
Source record: 180503

On August 16 th, I offered to pay the postage for Chip
to send his K2 Fractal Flyer antenna to a ham who had
no antenna. Chip's response to that ham was:
"The K2 Fractal Flyer still looks like your best option."

It has been one full month, and as all can see, Chip
did not respond.

My offer is hereby withdrawn.

ehsjr@bellatlantic.net wrote:

> Fractenna wrote:
>
> >
> > The K2 Fractal Flyer still looks like your best option. A low dipole will not
> > help.
> >
>
> Chip, that's a great idea. He has no antenna now, so the K2 would
> guarantee him GREAT comparative performance and earn you the
> kudos you want for the antenna. So I propose this: send him the
> antenna, along with whatever instructions he needs to put it up, if
> he agrees to the idea,and is willing to post his opinion of the
> antenna. Then we can all read how well he makes out
> on the bands. We will be getting a second ham's opinion of the
> antenna, you will be getting the credit that should be associated
> with it.
>
> To avoid any cost to you, I'll pay the postage, which I assume
> will be well under fifty dollars. I'll go that high, if you and he agree.
> Reach agreement here on the NG. Weigh the antenna, and find
> out what it will cost to send it to him, post that figure here.
> I'll send you a money order for that amount, up to fifty dollars.
> When you have the money order in hand, send the antenna to
> him. This is not a commercial transaction - neither he nor I am
> buying anything from you. It is an experiment, which would
> incur expense, and it is that expense that I am addressing.
>
> What say?
>
> >
> > 73,
> > Chip N1IR

2389. N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:34:54 UTC
From: k1bqt@aol.com
Message-ID: <20000917203454.10003.00000136@ng-cu1.aol.com>
Source record: 180504

Hi Chip--

>With my 520 watts, and the info available on the web on my antenna, what IS my EIRP?<

Your "520" Watts may actually be something very different. If you'd like to borrow my Bird 4391, pehaps you could measure (rather than "calculate") what your PEP output is. I'd be happy to send it to you--it's very easy to operate. As it is, how could you have a clue? Fact is, you don't, so why should I?

>Assume, say, a 1 dB insertion loss for the coax.<

Why would I do that? I don't know and neither do you. Have you measured it?

>...you made a serious gaffe in determining the OUTPUT power of an SB220.<

You are correct (not that "serious gaffes aren't made on here). When I make a mistake, I'm usually very quick to admit it so people on the newsgroup are not misled. How about you? This size of my wiener doesn't depend on being right. The size of everyone's learning depends on my readiness to be wrong.

The key factor is your ground conditions. How could you possibly know what you've got, given the irregular terrain of your site. Fact is, you can't. Like the insertion loss, you're assuming something based upon some arbitrary abstraction. So you're asking me? I can easily admit my "gaff", but what would be the point of trying to caluclate your ERIP. That would be an exercise in nonesense--as is your challenge.

I did try to point out that your output (which you seem to want to minimize) might be more than you think. I think Tom might have "amplified" upon that. The offer is open--I've got the right slug to make the test and I'm willing to share. Once we know what's coming out of your amp, then we can work on the rest of what is a very complex problem.

Rick K1BQT

2390. Re: NEC4 Model of MI2 Fractal Loop Vs Random Geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 00:56:36 UTC
From: william ewald <wgewald@att.net>
Message-ID: <n0qassogsclr2hamp3tjtkfpb330m871tm@4ax.com>
Source record: 180505

On Sun, 17 Sep 2000 11:58:19 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Where else can one observe an Ivy League Ph.D. squirming
>
>Thoughts, comments,
>
> Peter K1PO
>

BU is ivy league?

2391. WTB OR TRADE FOR MILITARY ANTENNAS, Equip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 02:02:05 UTC
From: steve4621@aol.com
Message-ID: <20000917220205.20656.00000090@ng-fx1.aol.com>
Source record: 180506

I am still looking to buy and trade for military antennas,masts, related equip.

Steve email please

2392. Re: Rectification in Alarm System speakers from Beam Antenna--help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:00:04 UTC
From: jerry r <jerryrcnospam@pobox.com>
Message-ID: <39C5933E.7668770D@pobox.com>
Source record: 180507

Just an RF choke may not work, you need a RF choke AND a capacitor, I assume this is low band, guess 75 meters?

100uh and .01 cap to ground.

What panel?

Have your isolated the zones that may be causing this.

I had a problem with my napco panel and the caps and chokes did the trick.

Also is the panel grounded? If it's UL install, you can't pull the ground, but if it's not try pulling the ground and trying another ground point.

2393. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:01:51 UTC
From: dinod@deltanet.com
Message-ID: <Psgx5.175832$6y5.105705937@news2.rdc2.tx.home.com>
Source record: 180508

From what I've read, he has opened the debate forum to discuss new ideas. He has people thinking. I've seen you debate him Tom which is proof that he has people thinking and talking. Conversation is good and harbors new and better ideas! Look at PSK31!

Dino

>Hi Dino, can you tell me what he is doing that is good for the amateur
>community?
>
>Just an example please.
>
>73 Tom

2394. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:10:50 UTC
From: dinod@deltanet.com
Message-ID: <eBgx5.175850$6y5.105724244@news2.rdc2.tx.home.com>
Source record: 180509

Now that was rude of you to say this about me. You don't even know me.

>Dino- You must be one of the most naive people alive. If you buy any of
>chips lies and obfuscations, you must be pretty new on this NG. For some
>specifics, see interspersed comments below.

I snipped the rest of your comments Bill. You have good points and I'm not going to argue with you about them. We agree that Tom is a superior designer.

As far as Chip's design, I can understand why he is secretive. Just ask K6STI and WA8DED. Both have been ripped off by the "Amateur Community". If his claims of working DXCC (if I remeber that correctly) is true, then obviously his design works. Personally I don't like the fractal antenna. But I don't like Cushcraft either and they seem to work well too.

I was asked for my "comments" and I gave them. Please don't attack me for having my opinions...especially when asked to give them.

Thanks Bill and 73!

Dino

2395. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:13:50 UTC
From: dinod@deltanet.com
Message-ID: <2Egx5.175858$6y5.105730217@news2.rdc2.tx.home.com>
Source record: 180510

No sir. I have the utmost respect for everyone of you! I will no doubt learn many things from you! The "Elmers" out there is one of the great things about Amateur Radio! Its the infighting we can all do without.

Thank You and 73!

Dino

>Bet you think we all fell off the watermelon wagon this morning!

2396. Re: Band Hopper Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:23:24 UTC
From: dinod@deltanet.com
Message-ID: <0Ngx5.175875$6y5.105747220@news2.rdc2.tx.home.com>
Source record: 180511

I just talked to a trucker this past week and he has a Band Hopper antenna.
I never saw one before. What he liked was the fact that the BAND HOPPER
does NOT change length when being tuned. This is important especially for
a trucker! He gave me their web address and I check them out...

http://www.bandhopper.com/

Personally, I like the High Sierra antenna and will buy it for my Suburban...

http://www.hsantennas.com/

But your best bet would probably be the band hopper because of its fixed
height. It can handle 600 watts.

Dino

>I am a trucker. I use an FT-100 as my main radio. I want to add some
>power for the HF bands with an amp. I have heard several other
>truckers talk of an antenna called the "Band Hopper" that will handle
>higher power levels. I am using the ATAS-100 now. I have limited room
>to mount antennas on the truck and grounding is also a problem that
>requires attention. I would like to find any information on a high
>power screw driver type antenna that can be remotely tuned. Any help
>or suggestions will be appreciated. Links to web sites would be a big
>help.
>
>Thanks and 73's
>George Haneke NV7Z
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

2397. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:30:47 UTC
From: dinod@deltanet.com
Message-ID: <XTgx5.175896$6y5.105760747@news2.rdc2.tx.home.com>
Source record: 180512

Maybe not, but the antenna works...and you can't argue that.

I'm curious too...who was this W! person?

Dino

>DXCC has NOTHING to do with antenna performance...
>so let's not be fooled by more obfuscation...
>
>For example, I have NO DXCC rating at all, and I am at least 20 dB
>louder than N1IR....anywhere...running 1 KW...
>
>The guy that had the highest DXCC # ran only dipoles and 100 W...,
>a W1...anyone know who that was???

2398. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:35:47 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39C5B7D9.401ED705@dvol.com>
Source record: 180516

CAM wrote:

> kb9olm@hotmail.com wrote:
>
> > I need a 9:1 balun for the Van Gorden "shorty" all band dipole, which
> > is fed with a 450 ohm balanced transmission line.
>
> Unless you are running an SWR of 1:1 on the 450 ohm feedline, you
> will NEVER see 450 ohms at the transmitter. I doubt that you need
> a 9:1 balun. I feed my 130ft dipole with 450 ohm ladder-line and
> I use a 1:1 balun/choke.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

>
Being notably lame technically in this topic area perchance you can straighten me out. Not-so-hypothetical scenario: 100 or so foot random length dipole/vee intended for use on 80-10, random length open wire feedline of random characteristic impedance. As you well know the feedpoint impedances can run from R2-j10 to R3500+j2500, the usual. I've done/tamed several of these and they work just ducky - as long as (in daze of yore) I stood on my head and cobbled together ungainly, inconvenient coil-swapping parallel-tuned tank center-link-fed balanced tuners and diddled the taps. So along comes the ferrite core balun craze. Per your post above, are you saying that any decent 1:1 balun/choke can transform the balanced feedline with an R(x) + j(y) impedance into an unbalanced feedline with an R(x) + j(y) feedpoint impedance no matter what? Or what?
>
Fact is that there are a gazillion very convenient to operate wide-range unbalanced tuners out there, the assorted MFJs being prime examples. To the best of my knowledge there are no real catalog-number balanced tuners out there today. The MFJs do have "baluns" and "open-line terminals" you can switch in and which supposedly properly feed balanced lines via their 1:1 baluns. What's getting lost in the shuffle/losses if anything??
>
w3rv

2399. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:50:51 UTC
From: fractenna@aol.com
Message-ID: <20000918005051.20596.00000154@ng-fl1.aol.com>
Source record: 180513

>Hi Chip--
>
>>With my 520 watts, and the info available on the web on my antenna, what IS
>my
>EIRP?<
>
>Your "520" Watts may actually be something very different. If you'd like to
>borrow my Bird 4391, pehaps you could measure (rather than "calculate") what
>your PEP output is. I'd be happy to send it to you--it's very easy to
>operate.
>As it is, how could you have a clue? Fact is, you don't, so why should I?
>
>>Assume, say, a 1 dB insertion loss for the coax.<
>
>Why would I do that? I don't know and neither do you. Have you measured it?
>
>>...you made a serious gaffe in determining the OUTPUT power of an SB220.<
>
>You are correct (not that "serious gaffes aren't made on here). When I make
>a
>mistake, I'm usually very quick to admit it so people on the newsgroup are
>not
>misled. How about you? This size of my wiener doesn't depend on being
>right.
>The size of everyone's learning depends on my readiness to be wrong.
>
>The key factor is your ground conditions. How could you possibly know what
>you've got, given the irregular terrain of your site. Fact is, you can't.
>Like the insertion loss, you're assuming something based upon some arbitrary
>abstraction. So you're asking me? I can easily admit my "gaff", but what
>would be the point of trying to caluclate your ERIP. That would be an
>exercise
>in nonesense--as is your challenge.
>
>I did try to point out that your output (which you seem to want to minimize)
>might be more than you think. I think Tom might have "amplified" upon that.
>The offer is open--I've got the right slug to make the test and I'm willing
>to
>share. Once we know what's coming out of your amp, then we can work on the
>rest of what is a very complex problem.
>
>Rick K1BQT
>

No Rick--

That's not good enough. I made an honest--and within practical limits--
accurate estimate of the output power , feed system insertion loss, and antenna
field strength.

NOW:

YOU tell us the EIRP. Otherwise you have hit us all with a barrage of
histrionics, meant to anger and incite. That is EXACTLY what we DON'T need in
this new age of FCC compliance.

So, what's my EIRP? Assume reasonable practical uncertainties and get it.

73!
Chip N1IR

2400. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:52:37 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C59F91.2ED83A86@oltraining.com>
Source record: 180514

Peter, I gather from your comments that Fractal antenna provide a great deal of fun off the air and in the NG for those in the know. May be it is rare to work a Fractal equipped station? The station I worked clamed to be using a two element Fractal quad. He took the time to claim that his small antenna's performance was comparable to a full sized quad. Now I wish I had taken more time too speak with him about his antenna. This NG has certainly peaked my interest in the design.

Terry

"Peter O. Brackett" wrote:

> Terry:
>
> You've got a Ph.D. and never heard of a fractal antenna?
>
> Disgusting! Chip will soon fix that!
>
> Terry... get with Dr. Cohen for a few emails and he'll bring you up to
> speed, even perhaps certify you with a fractal certificate.
>
> In case you don't know the certificate looks great framed beside your Ph.D.
> diploma. It's a modified certificate that's made from a DXCC certificate
> embossed with a seal from the Fractal Antennas corporate seal. Of course
> you will have to send Chip a notarized statement that you worked DXCC in no
> less than 30 minutes to get one of these awards.
>
> Enjoy...
>
> :-}
>
> Peter K1PO
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message
> news:39C1390C.11A422DB@oltraining.com...
> > I just worked my first fractal antenna - a ham in Portland, Oregon.
> > Until today I had never heard of one.
> >
> > Terry - W6LMJ
> >
> > Fractenna wrote:

> >
> > > Fun!
> > >
> > > Just worked country 310 on 10M with the 10M fractal quad yagi (see:
> > >
> > > http://www.fractenna.com/ham/hampage1.html
> > >
> > > 8Q7XX, first call!
> > >
> > > 73,
> > > Chip N1IR
> >
> > --

2401. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 04:55:49 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <pfhx5.94$VQ.13476@newshog.newsread.com>
Source record: 180515

```
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:8q3h4i$29j9$1@heap.juniper.net...
> W4JLE <w4jle@alltel.net> wrote:
> >Anything that create an RF point source (Read isotropic radiator) is
> >marketing to the wrong crowd. I know a lot of bucks have been spent to
try
> >to approximate an isotropic source. My guess is that the moving parts
must
> >be oiled daily with snakeoil.
> [...]
> >> www.c2i2.com/~lasono/dovetron/main.shtml
>
> They have a very odd definition of "isotropic", because they also say:
>
"They", have probably modified the definition so that a model may
approximate what a true isotropic radior would do taking into account ground
reflections. Course a true isotropic radiator is in free space as I recall.
Makes 'em really difficult to work on. <G>

Roger (K8RI)

> HALF OF THE RF RADIATES BELOW 45 DEGREES AND PRODUCES BOTH
> THE LOW-ANGLE, LONG- HAUL "DX" SKYWAVE VIA F2 AND THE
> SHORTER-HAUL E-LAYER "SHORT-SKIP".
>
> THE OTHER HALF RADIATES ABOVE 45 DEGREES AND IS THE
> NEAR-VERTICAL-INCIDENCE SKYWAVE (NVIS). IT PRODUCES COVERAGE OF
> THE CLOSE-IN 250 MILE RADIUS AREA. UNLIKE LINE-OF-SIGHT SIGNALS
> (MF/HF/VHF GROUNDWAVE), THE NVIS WILL REFLECT DOWN INTO VALLEYS
> AND CANYONS, BETWEEN BUILDINGS AND BEYOND THE HORIZONS.
>
> 70% of the area of a hemisphere is below 45 degrees, while 30% is
> above 45 degrees. If the pattern has equal power radiated above
> and below 45 degrees then the average power density above 45 degrees
> is 3.8 dB higher than it is below 45 degrees. This doesn't sound
> very isotropic.
>
> Dennis Ferguson
```

2402. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 05:13:17 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C5A46D.EF30211E@hiwaay.net>
Source record: 180517

Another peculiarity- the "antenna" in question has two power cords that must be plugged into outlets that are at least 10 (if I remember right) feet apart. This implies to me that they are using the house wire for something.

Any Ideas about this feature?

Bill

Roger Halstead wrote:
>
> --
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
> news:8q3h4i$29j9$1@heap.juniper.net...
> > W4JLE <w4jle@alltel.net> wrote:
> > >Anything that create an RF point source (Read isotropic radiator) is
> > >marketing to the wrong crowd. I know a lot of bucks have been spent to
> try
> > >to approximate an isotropic source. My guess is that the moving parts
> must
> > >be oiled daily with snakeoil.
> > [...]
> > >> www.c2i2.com/~lasono/dovetron/main.shtml
> >
> > They have a very odd definition of "isotropic", because they also say:
> >
> "They", have probably modified the definition so that a model may
> approximate what a true isotropic radior would do taking into account ground
> reflections. Course a true isotropic radiator is in free space as I recall.
> Makes 'em really difficult to work on. <G>
>
> Roger (K8RI)
>
> > HALF OF THE RF RADIATES BELOW 45 DEGREES AND PRODUCES BOTH
> > THE LOW-ANGLE, LONG- HAUL "DX" SKYWAVE VIA F2 AND THE
> > SHORTER-HAUL E-LAYER "SHORT-SKIP".
> >
> > THE OTHER HALF RADIATES ABOVE 45 DEGREES AND IS THE
> > NEAR-VERTICAL-INCIDENCE SKYWAVE (NVIS). IT PRODUCES COVERAGE OF
> > THE CLOSE-IN 250 MILE RADIUS AREA. UNLIKE LINE-OF-SIGHT SIGNALS
> > (MF/HF/VHF GROUNDWAVE), THE NVIS WILL REFLECT DOWN INTO VALLEYS
> > AND CANYONS, BETWEEN BUILDINGS AND BEYOND THE HORIZONS.

> >
> > 70% of the area of a hemisphere is below 45 degrees, while 30% is
> > above 45 degrees. If the pattern has equal power radiated above
> > and below 45 degrees then the average power density above 45 degrees
> > is 3.8 dB higher than it is below 45 degrees. This doesn't sound
> > very isotropic.
> >
> > Dennis Ferguson

2403. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 05:23:16 UTC
From: fractenna@aol.com
Message-ID: <20000918012316.23447.00000143@ng-fl1.aol.com>
Source record: 180518

>Now that was rude of you to say this about me. You don't even know me.
>
>>Dino- You must be one of the most naive people alive. If you buy any of
>>chips lies and obfuscations, you must be pretty new on this NG. For some
>>specifics, see interspersed comments below.
>
>
>I snipped the rest of your comments Bill. You have good points and I'm
>not going to argue with you about them. We agree that Tom is a superior
>designer.
>
>As far as Chip's design, I can understand why he is secretive. Just ask
>K6STI and WA8DED. Both have been ripped off by the "Amateur Community".
>If his claims of working DXCC (if I remeber that correctly) is true, then
>obviously his design works. Personally I don't like the fractal antenna.
>But I don't like Cushcraft either and they seem to work well too.
>
>I was asked for my "comments" and I gave them. Please don't attack me
>for having my opinions...especially when asked to give them.
>
>Thanks Bill and 73!
>
>Dino
>

Thomas Rauch, W8JI, has continually made every effort to lie, harass, and even threaten me. Last week he posed a death threat on this NG against me. I am in serious fear of this person and have taken the proper steps to protect myself and my family, which even included certain understated precautions here at the open house.

Two weeks ago I canceled a public ham talk in Portland, Maine, because he made public assertions that he would be present, and I was not given sufficient information how my safety could be assured. It is exactly W8JI's bizarre and threatening behavior that made me promise my wife that I would not give ANY MORE public talks to ham radio operators.

Understand what this means: someone who has championed and pioneered a new technology--of great interest to hams-- will NO LONGER speak to hams publicly. Imagine the kind of unrelenting harassment by W8JI and others that forces someone to make such a decision!!

One of the actions includes initiating the process of civil suit against Mr. Rauch in his home state of Georgia.

Nathan Cohen, Ph.D.

2404. Re: The world's best antenna designer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 05:38:13 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C5AA45.CD4B2E18@hiwaay.net>
Source record: 180419

Did I miss something again-? I thought I had read everything posted here, and I do NOT remember a death threat. I'm sure I would have remembered one if it was from Tom, or any of the regulars. I remember when Chip dodged the club meeting, and I remember all his talk about police at the "open house", but not anything serious.

Can someone give me the date and time, so I can read it for myself?

Bill-W4BSG

Fractenna wrote:

>
> Thomas Rauch, W8JI, has continually made every effort to lie, harass, and even
> threaten me. Last week he posed a death threat on this NG against me. I am in
> serious fear of this person and have taken the proper steps to protect myself
> and my family, which even included certain understated precautions here at the
> open house.
>

> Nathan Cohen, Ph.D.

2405. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 05:41:48 UTC
From: Terry Redding <terry@oltraining.com>
Message-ID: <39C5AB18.3CA288CD@oltraining.com>
Source record: 180420

David, thanks for the comments. BTW, I just paid a visit to your web site. Very very impressive. Worth a re-visit and taking a bit of time to see how you built the pages. I am typing this response while loading the web cam page. I also have a web cam at http:/www.olt.net/W6LMJ.

Back to the quad/loop. I have never used one - so bow to the experience of anyone who has. But I have observed to in operation. The first was used by Mike Stalter, Pebble Beach, California. An elmer of mine who took the time to introduce me to SSB operation on ten meters ground wave while I was stationed at Fort Ord, California in the mid 70`s.

Mike had a daily schedule with a ham in Japan on 15 meters CW. His modest choice of antennas was either a mono band 3 element yagi on 15 meters or a 15 meter loop (he called it a single element quad because it started out as the driven element of a quad - but he never added the reflector). He commented with some surprise that often the loop out performed the 3 element yagi, especially when the band appeared noisy.

My other experience - third hand again - was with an antenna used by WB2UJL - Ernie Miles, one summer. Ernie planned to operate from the Houston, Texas area for a three month period a few years ago and was concerned about having a consistently good signal for a 20 meter net he and I participate in each Sunday. Ernie's normal antenna is a 2 element GEM quad.

Ernie likes to experiment and is fairly deliberate about his projects. So, during the period leading up to his trip he bought a 30 foot pushup pole, balun, and built and refined his loop while still at home until it was a consistently good performer. His finally design for his 20 meter loop is my starting point for a loop on 40 meters. His final design was a loop, fed at the top, that hung down in a diamond configuration. As simple to erect as an inverted vee, it appeared to work well.

He operated weekly from his daughters QTH in Texas. She lived in a neighborhood with deed restrictions and so he put the antenna up for the nets, and took it down after each net. He operated with 100 watts using a TS 870. On our net was Fred Naylor, VK3AQN, who routinely checked in long path. Ernie had the distinction of being one of the few stations on the net able to work Fred consistently.

Much of what I have read here on the list indicates that both Mike Stalter and Ernie Miles enjoyed more success with their loops then they should have.

I am fortunate to have a tower with an inverted vee for 40 meters. Armed with the information gathered here I plan to put up a series of loops and compare them to the inverted vee. Hopefully I will learn something along the way, and end up with a better 40 meter signal to the mid west and west coast then I currently am able to achieve with the inverted vee.

Hmm, the web cam images seems to be black. Must be near real time. This is being typed at 1:36 a.m., from West Palm Beach, Florida. I will try it again in day light. Now I am curious to see if the web cam shot is from one of the towers in your images.

Thanks again for taking the time to comment on my loop project.

Terry - W6LMJ

David Robbins wrote:

> generally a loop with its top at the same height as an inverted v will perform
> worse than the inverted v(though only by a little bit). this combined with
> having double the wire in the air and the associated problems with ground and
> other obstruction clearance generally makes it better to run a plain inverted v
> over a loop. after modeling several loops and v's for installation here it is
> fairly obvious that this is because almost half the loop's radiation comes from
> the very bottom, closest to the ground and anything else that is in the way.
>
> > Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message
> > news:39C109D9.787DEAAB@oltraining.com...
> > > I am considering building a single element quad antenna. The plane is
> > > to hang it like an inverted vee from the yard arm off the side of the
> > > tower and feed it with a 1:1 balun at the apex of the high point.
> > >
> > > I am guessing that it will out perform my current inverted vee, have a
> > > strong horizontal component of radiation, and be a fairly quiet antenna
> > > to listen on.
> > >
> > > I wonder, has anyone on in the newsgroup put up a single element quad
> > > and compared it to an inverted vee?
> > >
> > > All responses appreciated.
>
> --
> David Robbins K1TTT
> e-mail: mailto://k1ttt@berkshire.net
> web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
> AR-Cluster node: 145.69MHz or telnet://k1ttt.net

2406. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-18 06:50:29 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <5Vix5.10416$0y5.529563@nntp3.onemain.com>
Source record: 180421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

"Brett - N7OLQ" <brett.miller_nospam_@intel.com> wrote in message
news:8q488p$rl@news.or.intel.com...
> I'm looking for a new house and a few I'm looking at have high power lines
> not far away. I'm wondering what affects on the various HF or even VHF
> bands the power lines might have. No these are are not so close that my
> antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any
> advice is welcome. Can much of the affect be removed with the right
antenna
> type & polarization?
>
> Thanks
> Brett - N7OLQ
> http://N7OLQ.home.att.net/Radio
>
>
>

In general high lines are not nearly the problem that old, grubby distribution lines can be. Assuming they are the usual 3-phase layout, only the unbalance current shows up in the near field anyway. Given the catastrophic nature of any failure and the numbers of people affected, your friendly neighborhood Reddy Kilowatt bunch is not going to let maintenance slip.

Beg, borrow, buy, don't steal, a battery powered radio, preferably shortwave capable and find out. Carry it with you and check the vicinity.

Personally, I have run 2, 10, and 15 mobile from a parking lot virtually under a 245kv line and listened to my el cheapo Grundig YB305 with no ill effects, to the radio reception at least. Until the glow dies down, it is hard to sleep :-)

Do the radio thing anyway; goofy noise sources are everywhere. And try to stay away from 400k ERP television stations and 100k FM if at all possible.

Enjoy being a homemoaner.

Dick N0BK

2407. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39C781D0.8AAE72D0@wb6hqk.ampr.org>
Source record: 180269

Stan Olson wrote:
>
> I live in the first floor of a dorm and I was wondering if there was any
> sort of antenna I could build or buy to improve reception / transmit on
> 2m/440... Outside antennas are not an option, so it has to be completely
> indoors.

Is your window clear glass or is it aluminized to reduce sunload? If it's clear glass, you might consider taping a full wave loop to the window glass. You would need a separate loop for 2m and 440 but that shouldn't be a problem. You can use thin uninsulated copper wire taped to the window for minimum visual impact but the adjustment may be a little difficult unless you have suitable test equipment. Monofilament fishing line stretched from the window frame can be used in lieu of tape if the RA has a problem with adhesive tape on the window. Another option is to use conductive burglar alarm tape which can be purchased at Radio Shack along with an appropriate adhesive and connectors. The larger conductors will result in a system which is less critical to adjust and somewhat less sensitive to objects moving around in the immediate vicinity.

Depending on the window size and orientation, you can also experiment with phased arrays of dipoles or loops if you need more performance or are simply interested in the design and implementation of more complex antenna systems.

> I've got an Icom W32A with a Comet BNC24 whip antenna on it right
> now. It works fairly well, but I was curious if there was anything else
> better to try other than walking outside and trying there, hehe. Would a mag
> mount dual band antenna work indoors?

bart
wb6hqk

2408. Re: Single element quad antenna - anyone using one?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Larry Gauthier <larryg_AT_ismi.net>
Message-ID: <39c78271@news.ismi.net>
Source record: 180270

David,

I have (or perhaps had) been considering the same single-loop design. I am about to erect a 60 foot tower, and thought I would install a pair of loops, 90 degrees out from each other, and feed them from the bottom. I'd then planned to design a switch box to select any two legs, hoping that I could produce a little gain and directivity on 30 meters.

From your response, I will be just as far ahead building two inverted vee's, and switch selecting between legs of them.

-larry
K8UT

and then select
"David Robbins" <k1ttt@berkshire.net> wrote in message
news:39C52593.A5ACDDE7@berkshire.net...
> generally a loop with its top at the same height as an inverted v will
perform
> worse than the inverted v(though only by a little bit). this combined
with
> having double the wire in the air and the associated problems with ground
and
> other obstruction clearance generally makes it better to run a plain
inverted v
> over a loop. after modeling several loops and v's for installation here
it is
> fairly obvious that this is because almost half the loop's radiation comes
from
> the very bottom, closest to the ground and anything else that is in the
way.
>
> > Terrence R. Redding, Ph.D. <terry@oltraining.com> wrote in message
> > news:39C109D9.787DEAAB@oltraining.com...
> > > I am considering building a single element quad antenna. The plane is
> > > to hang it like an inverted vee from the yard arm off the side of the
> > > tower and feed it with a 1:1 balun at the apex of the high point.
> > >
> > > I am guessing that it will out perform my current inverted vee, have a
> > > strong horizontal component of radiation, and be a fairly quiet
antenna
> > > to listen on.
> > >
> > > I wonder, has anyone on in the newsgroup put up a single element quad
> > > and compared it to an inverted vee?

> > >
> > > All responses appreciated.
>
> --
> David Robbins K1TTT
> e-mail: mailto://k1ttt@berkshire.net
> web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
> AR-Cluster node: 145.69MHz or telnet://k1ttt.net

2409. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7712-39C77E88-34@storefull-111.iap.bryant.webtv.net>
Source record: 180271

Rick, KD6QZD wrote:
"First choice is to improve reception towards the north or northwest
(around or over the volcano) for Honolulu stations."

First step is to determine which stations you can hear best now, however poorly or infrequently. How about shortwave? Those can be heard on the floor of the Grand Canyon where no medium wave stations are heard.

Are the medium wave stations you hear in Honolulu or are they in mainland states?

The stations you can hear now may be the ones to spend time on to improve reception.

With wavelengths in the hundreds of meters, horizontal antennas long enough and high enough to give the gain of a h-f directional array are usually too costly. Vertical arrays are costly too. So, what`s left? For medium wave there are super loops and long low wires.

Have you considered a satellite dish?

Super loops are available. Loop gain is nearly multiplied by the permeability of the loop`s core.
So, a big long powdered iron core is good bet. Less turns are required for the needed inductance and a high Q is possible.

A wire as long and as high as possible pointed in the desired direction is another good bet.

Best regards, Richard Hsarrison, KB5WZI

2410. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q80m0lje1@neptunium.btinternet.com>
Source record: 180272

Cecil, you know how much I dislike having computer programs thrown at me. Eznec is wrong. And I wouldn't argue with Walter just because my thumb happens to be just a teeny bit smaller than his.

SWR on a short high-Zo line has little to do with it. On 80m, what really matters is line loss, loss in the tuner, loss induced in the house structure and wiring and loss induced in the ground. And Eznec can't tell you any of that.

From Klines brief description of the antenna passing within a few feet of the roof of the house it can be assumed the feedline would be quite short. In fact, if the shack is in a bedroom the loss in the feeder will be small compared with the other losses mentioned.

Loading coils for 80m, the only band on which they might possibly be of use, would have a degrading effect on higher frequency bands which Kline specifically mentioned.

Adding 10, 15 or 20 feet of wire, towards the ground, from the dipole ends would overcome your objections to high swr.

And personally I prefer any loading coils to be very-low-loss, home-brewed, complete with alligator clips, in the form of a tuner, next to the transmitter. Oh yes, musn't forget the smoke alarm.
--
Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

CAM <cam2338@bigfoot.com> wrote in message news:39C76334.A560B46@bigfoot.com...
> Reg Edwards wrote:
> > Better performance than either of the loaded versions will
> > be obtained on all bands, 80 to 10, with a simple dipole of
> > random length (eg., your available 70 feet), fed with an
> > open wire (1 inch or greater spacing) line or 450-ohm ladder
> > line, also of random length. Simplicity = Efficiency and
> > easy maintenance.
>

> I dunno, Reg. EZNEC sez the SWR will be almost 200:1 on
80m.
> He could wind up trying to match two ohms or 90k ohms.
IMO, the
> G5RV length of 102ft is just about the minimum acceptable
dipole
> length on 80m. Walter Maxwell suggests that 3/8WL minimum
is a
> good rule of thumb.
>
> He could have a 70ft horizontal section and have 16ft
hanging
> down vertically on each end. But if the dipole has to be
70
> ft long, I think loading coils would work better for 80m
> operation.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2411. Re: SGC-230 and ladderline?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8q81u1$i7c$1@news.tribune.com>
Source record: 180273

I am using the Alinco EDX-2 which appears to me to be the SGC-230 with some of the brains removed. It tunes on command, not automatically.

I have been using it to drive a balanced feed line for over 2 years. Last time I mentioned it, several posters took issue with that configuration. I am not using any kind of balun, and I have the "ground" side grounded to the station ground. I wound an open air 1:1 balun and tried it out just to see if it changed anything. Only difference I noticed was a loss of received signal strength on the lower bands. I removed the balun the day of the experiment.

Initially I had the tuner under the desk and the feed line coming into the shack. Last year I moved it to the outside and added rf beads and torroids on my control line and coax. I have a large open frame relay that removes the feed line from the tuner and grounds the feed line whenever station power is off.

I am using a 100 watt Alinco DX-77T and the feedline is TV line.

Good luck
John KA9CAR

Floyd Sense <sentek@sprintmail.com> wrote in message
news:CGJx5.7169$nk3.344628@newsread03.prod.itd.earthlink.net...
> I was just going through the manual for my new SGC-230 tuner (replaced a
230
> PRO) and noted that on page 25 of the manual they show using the 230
feeding
> a center fed antenna through a balanced feedline. Elsewhere in the
manual,
> they make the point that you must not connect a feedline (assume they must
> mean a coax feedline) to the output of the tuner. Have any 230 owners fed
> balanced antennas via a balanced feedline? What's the effect of using a
> balanced feedline in this fashion, where one side is effectively grounded?
>
> K8AC
> Floyd Sense - Angier, NC
>
>

2412. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e69075.519898284@news.seanet.com>
Source record: 180274

On Tue, 19 Sep 2000 07:29:17 -0500, CAM <cam2338@bigfoot.com> wrote:

>W1RFI wrote:
>>
>> >From: "VE9SRB" srbest@worldnet.att.net
>> >I should not have made this statement on this NG and regret doing so.
>>
>> My opinion of you, sir, has just been elevated by about 10 dB.
>
>In that case, I should have never made any nasty statements whatsoever
>in my entire life. :-)

Hi Cecil,

Just goes to show how much you have to give up for an additional 3 dB.

73's
Richard Clark, KB7QHC

2413. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39C77088.5C26@pacbell.net>
Source record: 180275

W4JLE wrote:
>
> Anything works on ten meters, see QST a couple of months ago. There was a
> guy that worked WAC on 10 with a lightbulb mounted on a post. He had the
> coax choked so the only radiation was from the bulb and said it only took
> him 1 or 2 calls to get through. Almost identical to the fractal claims.
>
> --
>
> Fred W4JLE
> http://w4jle.com/
>
> "Dino" <dinod@deltanet.com> wrote in message
> news:XTgx5.175896$6y5.105760747@news2.rdc2.tx.home.com...
> > Maybe not, but the antenna works...and you can't argue that.
> >
> >

One of the most popular replacement antennas used on consumer type
radios and tvs over the years has been the good old
wire coat-hanger. People use them and get better reception
than if they used nothing at all, but no one has ever argued
that coat-hanger antennas are optimum in any sense other than being
readily available.

Tom Donaly KA6RUH

2414. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C798CB.6116D1EA@hiwaay.net>
Source record: 180276

See comments interleaved

Richard Harrison wrote:
>
>
> Relying on TESTIMONIALS can get you in trouble. The authors of the War
> Department book were America`s leading scientists.

If our resident "Scientwist" is an example, we need all the additional help we can get.

> This War Department book is old, but the laws of nature have not changed
> any more than Ohm`s law has changed.

A true statement that ignores the fact that INTERPRETATION of the natural laws does change, and frequently. Add to this the ever-present problem with verbal communication, and definition arguments, and the immutability of Natures laws is not really the question.
>
> Best regards, Richard Harrison, KB5WZI

I hope this helps

Bill-W4BSG

2415. ID Wizard - New Software

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <ssf6kv3korandf@corp.supernews.com>
Source record: 180277

Greetings Group,

While you are trying out those antennas, you might find this software useful. :-)

Just released, a new "downloadable" software product named "ID Wizard". It is QSLware, meaning it's basically "free". The only catch is we request users send an email with comments.

Here's a little info about the software.

"
ID Wizard is an ID timer with system clock setting and miscellaneous tools.

Tools include:
Notes - a full-featured "text" editor
Calculator - with "tape" display
Net Utility - Trace Route, Ping and WhoIs
Time setting via the net with "Simple Network Time Protocol"

The clock face is fully customizable. User can select a bmp picture for the face, plus select clock hand color and more.

Screen shots, more info and download from:
http://www.taborsoft.com/softstuff/idwiz/
"

Also available, a fancy ID timer, as QSLware. It's named NERDAlert 2000. It's presented in a more "fun" spirit. You will find it a very capable ID timer. If you wish to look at it:
http://www.hamtools.com/nerdalert/

Regards,
Jim
--
http://www.taborsoft.com/
Communications Analysis Prediction Wizard
CAPMan HF Propagation Prediction & System Analysis Software
Jim's page: http://www.wtrt.net/~ku5s/

2416. Site is up and running now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: kc1wj@kc1wj.com
Message-ID: <8q8762gd1@nnrp1.deja.com>
Source record: 180278

http://www.kc1wj.com
http://www.usham.com

Please check them out!

Tnx

Sent via Deja.com http://www.deja.com/
Before you buy.

2417. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C79E0D.E2A3F074@eznec.com>
Source record: 180279

I'd like to caution once again against using Chip or any other single person or small group to be representative of Ph.D.'s in general. Or against stereotyping any group, for that matter.

Some of the regular and most helpful and knowledgeable posters on this group have a Ph.D. degree. They don't belong in the same group as Chip, even though they might have the same level of degree.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> Apparently only Ph.D.'s and such are impressed by DXCC.
>
> Any certificate will impress a Ph.D.... they are certificate obsessed.
>
> Now some just perfect antennas and design equipment and don't need a fancy
> certifiicate to prove they can talk fast.
>
> Ph.D., bah... obsessive test takers and certificate hunters, not confident
> in their own abilities they seek afirmation in sheets of parchment with
> fancy lacework on the borders.
>
> Thoughts, comments?
>
> Peter K1PO
> --
> Peter O. Brackett
> Morrisville, NC

2418. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8q87ne$114$1@nnrp1.deja.com>
Source record: 180280

Why do you want to know, Stan?

In article <8q7qrv$9m2$4@sunburst.ccs.yorku.ca>,
yu131537@yorku.ca wrote:
> Hello Everyone
>
> May I please ask for your help. I am sorry to be a little off topic,
> but the other newsgroups devoted to radio seem to be a lot less
> popular then this group.
>
> Could you please tell me the names of shock jocks like Howard Stern,
> Don Imus, Mancow Muller? It would also help if I knew the names of
> the radio stations they work for. Would you know of
> websites/newsgroups where I could find this info?
>
> Thanks a lot, I would truly appreciate your help!!
>
> Stan
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

2419. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39e79e2e.523411125@news.seanet.com>
Source record: 180281

On Tue, 19 Sep 2000 06:56:24 -0700, Donaly <dtdonaly@pacbell.net>
wrote:

>W4JLE wrote:
>>
>> Anything works on ten meters, see QST a couple of months ago. There was a
>> guy that worked WAC on 10 with a lightbulb mounted on a post. He had the
>> coax choked so the only radiation was from the bulb and said it only took
>> him 1 or 2 calls to get through. Almost identical to the fractal claims.
>>
>> --
>>
>> Fred W4JLE
>> http://w4jle.com/
>>
>> "Dino" <dinod@deltanet.com> wrote in message
>> news:XTgx5.175896$6y5.105760747@news2.rdc2.tx.home.com...
>> > Maybe not, but the antenna works...and you can't argue that.
>> >
>> >
>
>One of the most popular replacement antennas used on consumer type
>radios and tvs over the years has been the good old
>wire coat-hanger. People use them and get better reception
>than if they used nothing at all, but no one has ever argued
>that coat-hanger antennas are optimum in any sense other than being
>readily available.
>
>Tom Donaly KA6RUH

Hi Tom,

You neglected that with that particular style of antenna, the most
popular optimization employs crumpled (dare I say fractalized?) tin
(aluminum/aluminium) foil balls at the ends.

Every kid in America (before cable) learned optimization first hand.
It is only because of cable that this art has died and discussion of
the optimized coat-hanger has fallen into decline.

73's
Richard Clark, KB7QHC

2420. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Frazier <frazier@flex.com>
Message-ID: <39C7A264.F85F763B@flex.com>
Source record: 180282

Thanks for the responses. (public and private)

I can hear Honolulu station at 830Khz. I can also hear a number of mainland stations like 1090 and rarely 810. In all cases (even Honolulu, which is about 200 miles away) I have nearly no reception during the day, and significant fading during night listening. There are several other stations I'd like to get again, so I don't want to limit myself to a specific frequency. Also, even some of the local stations are occasionally weak in the daytime, with frequencies of 620, 670 and 850Khz. After my escape from the major rat race in California, I wouldn't trade living here without a real good living, but it'd be nice to have better AM reception.

I've seen a picture of the Kiwa Loop (air core) and it looks interesting, but I can't handle the $400 price tag. I've a limted budget for this project, though a decent amount of time for experimentation. Parts can be a problem over here, as there are no available surplus stores or ham swaps, so most of my parts will need to be ordered mail order, or wait for my next visit to California.

I'd be interested in building a loop, either air or powdered iron core, but don't have a good idea where to start looking for details (wire size, number of turns, capacitance to add, etc.) Also, pointers to available core material would be nice.

I do have a device called a select-a-tenna (541-M) that I bought a few years ago which helps some. It provides a pre-selection function by mutual coupling with the internal loopstick of the portable receiver, and can be used to connect to the antenna terminals of either radio. I'm guessing it's not really much more than a loop with a capacitor across it.

Satellite? I've a C/Ku band dish (aka BUD, Big Ugly Dish) but the program sources I'm trying to receive aren't on the sat. audio channels.

Long wire is somewhat limited as to direction and height due to the relative lack of trees.
I could get about 150 feet of wire in the air to the south, or 200 to the north, but the maximum height would be about 25 feet or so, with a big droop in the middle because one end would need to be secured to a tree, and even with a pulley and weight mechanism to keep the wind movement from killing the wire, it would probably droop quite a bit. I may put one up just to see how much it helps, even if I

Richard Harrison wrote:

> Rick, KD6QZD wrote:
> "First choice is to improve reception towards the north or northwest
> (around or over the volcano) for Honolulu stations."

>
> First step is to determine which stations you can hear best now, however
> poorly or infrequently. How about shortwave? Those can be heard on the
> floor of the Grand Canyon where no medium wave stations are heard.
>
> Are the medium wave stations you hear in Honolulu or are they in
> mainland states?
>
> The stations you can hear now may be the ones to spend time on to
> improve reception.
>
> With wavelengths in the hundreds of meters, horizontal antennas long
> enough and high enough to give the gain of a h-f directional array are
> usually too costly. Vertical arrays are costly too. So, what`s left? For
> medium wave there are super loops and long low wires.
>
> Have you considered a satellite dish?
>
> Super loops are available. Loop gain is nearly multiplied by the
> permeability of the loop`s core.
> So, a big long powdered iron core is good bet. Less turns are required
> for the needed inductance and a high Q is possible.
>
> A wire as long and as high as possible pointed in the desired direction
> is another good bet.
>
> Best regards, Richard Hsarrison, KB5WZI

2421. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C7A1CD.7971FAA3@bigfoot.com>
Source record: 180283

Reg Edwards wrote:
> Adding 10, 15 or 20 feet of wire, towards the ground, from
> the dipole ends would overcome your objections to high swr.

Here's what I said: "He could have a 70ft horizontal section
and have 16ft hanging down vertically on each end."

Exactly what is wrong with 16 feet? :-)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2422. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C7A600.1252CD20@eznec.com>
Source record: 180284

CAM wrote:

> What you say is true about inducted common-mode currents. Hopefully,
> the antenna system geometry minimizes these inducted currents. What
> I am referring to are the *conducted* common-mode currents as discussed
> in Roy's article, "Baluns: What They Do And How They Do It", in the
> ARRL Antenna Compendium Vol 1. . .

I want to make sure credit goes where it should. The first time this was brought to light in the amateur literature, to my knowledge, was in Walt Maxwell's article "Some Additional Aspects of the Balun Problem", in QST, March 1983. My Compendium article adds to what Walt presented.

Roy Lewallen, W7EL

2423. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: BB <tracker8565@my-deja.com>
Message-ID: <8q8aj0$4on$1@nnrp1.deja.com>
Source record: 180285

Hi,
I am in a similar situation, but am on the top floor of my dorm. I went with a 300 ohm twin-lead j-pole inside of pvc and it works great. It is easy to get into the local repeaters and the swr is about 1.4 to 1 on both bands with 10 watts, 1.2 to 1 with 5. Only bad part, if you don't have a air wound coil, it will get into the speakers of nearby radios. Currently it is hanging iverted infront of my window and nobody seems to care, they can't see it, hi. Here is a web-page to the plans, and everything should be available at the local hardware, except coax and connectors. These are the plans that I used.

http://www.thedragonmaster.com/j-pole.html

-73's- and good luck.
Bill

Sent via Deja.com http://www.deja.com/
Before you buy.

2424. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_QNx5.5800$Cq6.439840@bgtnsc04-news.ops.worldnet.att.net>
Source record: 180286

"Fractenna" <fractenna@aol.com> wrote in message
news:20000919081308.06614.00000259@ng-cc1.aol.com...

>
> EIRP= power to antenna times peak field strength (call it directivity if
you
> wish, some herehave been using the term wrong abd calling GAIN the same as
> DIRECTIVITY).
>
> Chip N1IR

EIRP is the effective isotropic radiated power sometimes commonly referred to as ERP. It is a reference indication of how much power a system (not antenna) "effectively" radiates as compared to the power the system would radiate if an isotropic antenna were used as the system antenna. EIRP is determined by multiplying the power delivered to the system antenna (SWR mismatch loss included) by the antenna gain. The resulting quantity from this multiplication is power. EIRP is not determined from power to an antenna times peak field strength. Radiated field strength being defined in V/m (I have never seen antenna gain referred to as peak field strength). I am not sure what units power * volts/m yields.

I did not see the posts where someone stated that directivity and gain were the same thing. This would only be true if the antenna had 100% efficiency. I did however see the posts where the performance of two antennas were compared and directivity was one of the comparison factors. In this comparison both antenna had virtually identical radiation and loss resistance so a comparison of directivity was an acceptable indication of relative performance.

73,
Steve VE9SRB

2425. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39C7AE0A.24A24550@bellatlantic.net>
Source record: 180287

Dino wrote:

> Maybe not, but the antenna works...and you can't argue that.

What makes you say the antenna "works", and what do you
mean by "works"?

Have you used a 10 M - or other ham band - fractal antenna?

> Dino
>

2426. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8bpj$1hr$1@uranium.btinternet.com>
Source record: 180288

The answers to the questions can be found by using Godess
Eznec.

That is if you you know how to worship and make use of her.

Otherwise flounder about in ignorance.

Roy, tell 'em how to do it !

Reg.

CAM wrote
> Tom W8JI wrote:
> > The common-mode impedance of the outside of the cable is
generaly
> > limited by all the "stuff" it couples to. You can be
pretty sure the
> > electrical length isn't anywhere near what you expect in
most
> > practical installations.
>
> What's the feedpoint impedance of a half-wave folded
monopole?
> If the physical length including VF is 1/2WL and grounded
at one
> end, it is hard to visualize how the impedance at the
other end
> could possibly be any lower.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2427. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C7B57E.673CD37@uci.edu>
Source record: 180289

Fractenna wrote:
>W1RFI wrote:

> >I may have missed it, Chip; did you post the methods you used to calculate
> >the
> >EIRP in the first place? I am especially curious about the gain of the
> >antenna
> >and by what generally accepted method it was derived (NEC model, calibrated
> >antenna range, etc.) I think from there, the competent folks here can
> >quickly
> >tell you if your calculations are flawed, if you need such reassurance, that
> >is. :-)

> >73,
> >Ed Hare, W1RFI

> Nope; I don't need any pats on the head OR back; but go take a look at the
> elevation power pattern comparison to a dipole (Fig 3) .

> http://www.fractenna.com/ham/hampage1.html

Still can't find the EIRP there Chip.

> EIRP= power to antenna times peak field strength (call it directivity if you
> wish, some herehave been using the term wrong abd calling GAIN the same as
> DIRECTIVITY).

Yeah. What number do you use for the amount of power you're sending to
the antenna?

> If you wish to see how the EIRP figures into galactic SETI and the best way to
> establish a link, , then I will send you a preprint in a few weeks to W1RFI,
> if requested.

I think the topic of discussion was the fractal antenna in your back
yard, not the radio observatory antenna. Do you not want to talk about
that anymore? :-)

2428. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919145116.29001.00004689@ng-cg1.aol.com>
Source record: 180290

>Dino wrote:
>
>> Maybe not, but the antenna works...and you can't argue that.
>
>What makes you say the antenna "works", and what do you
>mean by "works"?
>
>Have you used a 10 M - or other ham band - fractal antenna?
>
>> Dino
>>

Look at the ham page

http://www.fractenna.com/ham/hampage1.html

and be a goody dooby and tell us what is wrong or misleading or just plain inaccurate about the performance the relative advantages or anything else. Go ahead and do everyone a favor and tell them what is wrong.

From what I've seen of other ham antenna web pages this is perhaps the best documented antenna from a performnace and modeling standpoint on the web.

Dr. Cohen should be getting major kudos for helping hams out. Not stupid idiotic crap like this from a few jerks.

Phil
de N1ZKT

2429. Mosley Pro 96S

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: bobs@isquare.com
Message-ID: <39c7b6f0.229428650@news.pressroom.com>
Source record: 180291

I'm thinking of purchasing a Pro 96S-30. Does anyone have any comments
good or bad about Mosley or this particular antenna?

vy 73, Bob
W0YVA

2430. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919150016.15866.00003232@ng-md1.aol.com>
Source record: 180292

>Yeah. What number do you use for the amount of power you're sending to
>the antenna?

Read the posts you dodo.

Why should Dr. Cohen repeat his stuff for lazy people like you?

Phil
de N1ZKT

2431. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8df6$4us$1@plutonium.btinternet.com>
Source record: 180293

Cecil, fine, he doesn't need any lossy loading coils,
weighing down the antenna, reducing effective height, and on
the whole being nothing but a maintenance problem.

I have recently received a suggestion from an Italian
amateur that I should include in my antenna programs the
weight of the copper wire needed to wind the computed number
of turns on my loading coils and traps.

If I could find room on the screen I could very well do
that. But then I would receive extra requests from deprived
US amateurs for the weight and amount of sag to be presented
in lbs and inches rather than kilograms and cms.

There's no way I can win !

--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

CAM <cam2338@bigfoot.com> wrote in message
news:39C7A1CD.7971FAA3@bigfoot.com...
> Reg Edwards wrote:
> > Adding 10, 15 or 20 feet of wire, towards the ground,
from
> > the dipole ends would overcome your objections to high
swr.
>
> Here's what I said: "He could have a 70ft horizontal
section
> and have 16ft hanging down vertically on each end."
>
> Exactly what is wrong with 16 feet? :-)
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2432. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8fkh$9r7$1@plutonium.btinternet.com>
Source record: 180294

Nothing wrong with 16 feet. Can can we ignore a change to 6
feet plus 2 feet + 2.387 inches at 3.76174 MHz.

But my figures apply at 20.0 degrees centigrade I
understand much american data is at 25.0 degrees centigrade.
Fractal reports and investigations don't bother to mention
ambient temperatures. So it can't matter very much. But we
must not junk american data just because of this minor
reporting inconsistency.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

CAM <cam2338@bigfoot.com> wrote in message
news:39C7A1CD.7971FAA3@bigfoot.com...
> Reg Edwards wrote:
> > Adding 10, 15 or 20 feet of wire, towards the ground,
from
> > the dipole ends would overcome your objections to high
swr.
>
> Here's what I said: "He could have a 70ft horizontal
section
> and have 16ft hanging down vertically on each end."
>
> Exactly what is wrong with 16 feet? :-)
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2433. Re: Site is up and running now

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8fki$9r7$2@plutonium.btinternet.com>
Source record: 180295

Why don't you arouse curiosity by giving us a clue as to
what the website is all about ?

Otherwise most people will do what I'm about to do.

Have a good day.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

2434. Comments: Alpha Delta DX Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Joe & Bonita Sanada <bsanada01@snet.net>
Message-ID: <39C7C2D6.2347B017@snet.net>
Source record: 180296

*I want to know anyone who has had any success with the Alpha Delta DX
LB
*
*Plus antenna or any other Alpha antennas I am looking to purchase one
*
*Would I need my Vectronics HFT1500 Tuner?
*
*Thanks 73 Joe W1JAS
*
*Terryville CT.

2435. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C7C304.1F14E089@hiwaay.net>
Source record: 180297

Reg- Why should we care what units you use? Anyone comepetent to take advantage of your library of handy stuff should be aware of the conversions among mm, cm, meters, in, ft, and yards- Its only arithmetic.

Bill-W4BSG

Reg Edwards wrote:
>
> Cecil, fine, he doesn't need any lossy loading coils,
> weighing down the antenna, reducing effective height, and on
> the whole being nothing but a maintenance problem.
>
> I have recently received a suggestion from an Italian
> amateur that I should include in my antenna programs the
> weight of the copper wire needed to wind the computed number
> of turns on my loading coils and traps.
>
> If I could find room on the screen I could very well do
> that. But then I would receive extra requests from deprived
> US amateurs for the weight and amount of sag to be presented
> in lbs and inches rather than kilograms and cms.
>
> There's no way I can win !
>
> --
> --
> Regards from Reg, G4FGQ
> For free radio design software go to:
> http://www.btinternet.com/~g4fgq.regp
> --
> CAM <cam2338@bigfoot.com> wrote in message
> news:39C7A1CD.7971FAA3@bigfoot.com...
> > Reg Edwards wrote:
> > > Adding 10, 15 or 20 feet of wire, towards the ground,
> from
> > > the dipole ends would overcome your objections to high
> swr.
> >
> > Here's what I said: "He could have a 70ft horizontal
> section
> > and have 16ft hanging down vertically on each end."
> >
> > Exactly what is wrong with 16 feet? :-)
> > --

> > 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2436. Taylor Radio Co. 2-Mtr magmount

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: wboas <wboas@chisp.net>
Message-ID: <Pine.LNX.4.10.10009191416540.8886-100000@edison.chisp.net>
Source record: 180298

have subject antenna with base, loading coil, but no whip.
Net search finds nothing on Taylor Radio Co.

Does anyone know anything about them, if they are out-of-business or
acquired by someone else.

Need to calculate or find specs for a new whip.
Any info would be helpfull. Believe antenna dates from ca. 1978.

Bill
wboas@chisp.net

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

2437. Re: Taylor Radio Co. 2-Mtr magmount

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C7D367.7103@wt.net>
Source record: 180299

wboas wrote:
>
> have subject antenna with base, loading coil, but no whip.
> Net search finds nothing on Taylor Radio Co.
>
> Does anyone know anything about them, if they are out-of-business or
> acquired by someone else.
>
> Need to calculate or find specs for a new whip.
> Any info would be helpfull. Believe antenna dates from ca. 1978.
>
> Bill
> wboas@chisp.net

587/freq in mhz=length in ft. Multiply X 12 for inches. For 146 mhz the whip needed would be 48.2 inches.
BTW, the formulas for the loading coil if needed are 165/freq in mhz X 6.26 for a non grounded coil. For a grounded coil would be 305/ freq X 6.26 . Answer is in microhenries needed. But yours should work fine as is. I just threw in the coil formulas in case someone tries to make a 5/8 ant. MK
--
http://web.wt.net/~nm5k

2438. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <7sQx5.3330$Xo6.157624@news-east.usenetserver.com>
Source record: 180300

Mak wrote in message <8pvubpnir1@neptunium.btinternet.com>...
>Gentlemen, your estimates please on the impedance of my proposed HF
>aerial:-
>You can approximate the end fed impedance by using NEC or one of its derivates. Start with a modest number of segments, and derive the impedance driven one segment from the end. Increase the number of segments and again get the impedance one segment from the end. Repeat to the limit of the program, Plot the impedance vs the number of segments. extrapolate to infinite segments by eye.

You can get another estimate by mirror imaging the antenna in free space, connecting these by 3 short segments. the feed impedance at the middle segment is of the order of twice the end impedance.
bob w4mb

2439. HF link coupled feed question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bob <xyz_p15218@flash.net>
Message-ID: <%yQx5.2032$864.87790@news.flash.net>
Source record: 180301

Link coupled HF antenna tuners drawings usually show a split variable capacitor in parallel with the "secondary" coil feeding the feeders. The rotor of the capacitor is shown grounded in many schematics. I have tried my system both ways...with the rotor grounded and floating. It seems to make no difference and only a miniscule difference in the SWR. The antenna is a 40 meter dipole fed with twin lead and used on 40, 30 and 20 with the same link circuit, using different taps on the coil. Anyone know for what purpose the rotor might be grounded??
Thanks
KB8TL
Bob

remove the XYZ_ to reply

2440. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919171347.13334.00001164@ng-cu1.aol.com>
Source record: 180302

As the Open House happened (successfully) several days ago, and all we now get are the malcontents who didn't show up anyway, this thread is retired.

I have already sent e-mail thanking those who came. Seems they had a great time.

Even though 10M wasn't hot, the grill was--I do good grill marks:-)

One guy said:'no one will believe your antennas. They're just too small even tho they work great. I think it's a (male organ) envy thing for hams'.

Sigh.

73!

Chip N1IR

2441. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39c7dac8_1@news1.prserv.net>
Source record: 180303
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

Brett:
The correct answer is:
Any location where any power line will be visible from the uppermost part of the antenna structure is too close.

The comment that distribution lines are more likely to cause radio noise than transmission lines is correct. All cases of noise can be mitigated, but some are too expensive, and often the downsized utility has no one knowledgeable enough to locate the sources, anyway.

Pay the utility which serves the area a visit and ask two questions:
1. Do you have TVI mitigation capability?
2. Does this capability extend to shortwave?

If they can answer either question without having to go into an engineering conference, you will be miles ahead.
--
Crazy George

Brett - N7OLQ <brett.miller_nospam_@intel.com> wrote in message news:8q488p$rl@news.or.intel.com...
> I'm looking for a new house and a few I'm looking at have high power lines
> not far away. I'm wondering what affects on the various HF or even VHF
> bands the power lines might have. No these are are not so close that my
> antenna could ever touch. These are maybe 1/4 to 1/2 mile away... any
> advice is welcome. Can much of the affect be removed with the right antenna
> type & polarization?
>
> Thanks
> Brett - N7OLQ
> http://N7OLQ.home.att.net/Radio
>
>
>

2442. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c7d707.46978722@news.akorn.net>
Source record: 180304

On Tue, 19 Sep 2000 08:28:08 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>It is important to consider the source. None are infallible. But, I >recall reading of the WW-2 efforts to produce the military book in a >civilian book published about 50 years ago. Authors of the civilian book >were Timbie and Bush, if I recall correctly.

More people probably understand the Beverage better now, than 50 years ago.

>The military book, "Electrical Communications Systems Engineering", does >not include any puffery for promotion. It was issued, not sold.

As are $1000 toilet seats, in the military. As was Star Wars.

>Relying on TESTIMONIALS can get you in trouble. The authors of the War

Amen. That's why I go by practical experience and the experinence of others.

NEC agrees closely with the results everyone sees also.

>This War Department book is old, but the laws of nature have not changed >any more than Ohm`s law has changed.

Just like the 1/4 wl long folded dipole TV antennas? If it's in a book, it must be right...eh?

Seriously Richard, your book may say otherwise but that isn't how it works. If you doubt that, ask other people with both Beverages and full size verticals, or look at other references.

73 Tom

2443. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000919174259.22734.00000230@ng-cd1.aol.com>
Source record: 180305

>Why should Dr. Cohen repeat his stuff for lazy people like you?<

Oh Oh, guess Chip can't answer the question, so he sent in the special team for the personal attack. Time to go.

Rick K1BQT

2444. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18153-39C7DD36-21@storefull-115.iap.bryant.webtv.net>
Source record: 180306

Rick, KD6QZD wrote:
"I can hear (a) Honolulu station at 830 KHz."

My charts show KIKI in Honolulu at 250 Watts, non-directional, with a probable unobstructed service radius of about 75 miles. Rick is 200 miles away and has an obstruction near his site and in the path. Rick could also have nighttime interference from WCCO in Minneapolis which runs 50 KW non-directional.

Rick can sometimes get 1090 KHz from the mainland. This would likely be KING in Seattle, which runs 50 KW.

Rarely. Rick gets 810 KHz. This would likely be KGO in San Francisco. The problem with this 50 KW station would be its north-south directional array designed to cover the mainland`s Pacific Coast.

620, 670, and 650 KHz are other possibilities, but they are relatively low powered stations in Hawaii. 620 is a regional channel usually limited to 5 KW. 670 and 650 are former 50 KW clear channels now shared with lower powered regional stations. 670 KHz is occupied by WMAQ in Chicago, the former clear channel station. 850 is occupied by KOA in Denver.

KNBC in San Francisco on 680 KHz may be another possibility using a selective receiver and a directional antenna to eliminate interference from the "local" 670 KHz station. KNBC is 50 KW and non-directional.

I used to listen to WCBS, New York from Lisbon, Portugal with good results, nightly. I used a Beverage antenna at about 12-foot elevation supported on poles. It was very long. I had a 500-acre site.

What Rick wants to do can be done, but it isn`t that cheap and easy for every day results.

Best regards, Richard Harrison, KB5WZI

2445. Re: N1IR OPEN HOUSE and PW signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c7decc.48968088@news.akorn.net>
Source record: 180307

On 19 Sep 2000 12:16:44 GMT, fractenna@aol.com (Fractenna) wrote:

>Gee; if one of my STUDENTS was off by 12 dB they'd get some red ink and a
>friendly office meeting!
>
>73
>Chip N1IR

You were off 10 dB in the thread on RFI.

I assume you gave yourself the customary "red-ink" and an "office
visit"? Or is 10 dB close enough?

73 Tom

2446. Re: HF link coupled feed question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c7df91.49164951@news.akorn.net>
Source record: 180308

On Tue, 19 Sep 2000 21:06:03 GMT, "Bob" <xyz_p15218@flash.net> wrote:

>circuit, using different taps on the coil. Anyone know for what purpose the
>rotor might be grounded??
>Thanks
>KB8TL
>Bob

Harmonic suppression.

73 Tom

2447. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919175330.28440.00000236@ng-fm1.aol.com>
Source record: 180309

>What makes you say the antenna "works", and what do you
>mean by "works"?
>
>Have you used a 10 M - or other ham band - fractal antenna?
>
>> Dino
>>
>

It seems to me that Dino recognizes that the on the air success, documented technical info, and fact that many hams have built and are using these antennas indicates this is so.

Is there some counter-data you wish to present that the 10M FQY does NOT work as described? Please post your data on a web page and I will be happy to link and critique.

The only data I have seen to the contrary are:

1) W4JLE's hoax from Sept 1999;
2) W8JI's hoax--in which he claimed the fractal was so inefficient that it burned his grassland from starting a fire.

There ya go: ham radio showing it's best face to the public.

Also, as Phil asked you earlier, what is it about the web page that you take exception to:

http://www.fractenna.com/ham/hampage1.html

Either stop complaining or give something concrete that can be discussed.

73
Chip N1IR

2448. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <OKRx5.698$u95.2244233@news.ntplx.net>
Source record: 180310

Fractenna <fractenna@aol.com> wrote:

> I am a bit amused that HAMS assume I am the village idiot. Some anyway.

Hey, even the best of us are seen as idiots by someone, sometimes. On occasion, I think we all deserve the title. I sure know I have put my foot in it once in a while. :-)

> EIRP= power to antenna times peak field strength (call it directivity if you
> wish, some herehave been using the term wrong abd calling GAIN the same as
> DIRECTIVITY).

Yes, you are correct that gain does NOT mean directivity, although one cannot have gain without it. One could have an antenna that was very directive, but very lossy, thus had no gain. A beverage receiving antenna or most small loops are good examples.

However, EIRP is not the ratio between power and peak field strength. One cannot directly create a ratio out of applied power to an antenna and a measured or calculated electric or magnetic field. Even in calculating the power density (if you are in the far field) or the plane-wave-equivalent power density if you are in the near field, you cannot easily calculate EIRP from applied power and the measured or calculated power density at a given point. If you stipulate far field conditions, the calculation can be done *if* you know the specfic distance you are from the antenna, but I have never seen EIRP defined as the ratio of applied power to power density; I don't even want to work out the formula. :-)

In essence, EIRP is the ratio between the applied power to an antenna and the power that would have to be applied to an isotropic radiator to create a field strength or power density of the same value, at any far-field point that is in the direction of maximum directivivity from the antenna.

A subtle difference, but an important one to those that want to correctly use the term "field strength." Many hams say "field strength" when they mean "power density;" I know I once did, having been called on the carpet at an RFI talk for saying that, in the far field or an antenna, the field strength decreases as the inverse square of the distance (1/D^2). My statement was incorrect; in the far field, the field strength (ie, electric or magnetic field) from an antenna decreases in inverse proportion to distance (1/D). The power density, or square of the field, decreases by the inverse square.

> If you wish to see how the EIRP figures into galactic SETI and the best way to
> establish a link, , then I will send you a preprint in a few weeks to

W1RFI,
> if requested.

I certainly would not mind seeing the article. I generally skip right to the chase and use the path loss formula, antenna gains, feed line losses receiver noise figure if dealing with a true line of sight path. If there is known path attenuation, I can add or subtract that in, too.

> Isn't EIRP wonderful?

It certainly does have its uses. If EIRP is known, for example, one can easily calculate system losses, too, by just assuming the transmit antenna to have 0 dBi gain. One can also, using the same assumption, calculate field strengths, power densities, etc., in the far field from an unknown antenna. EIRP will also give you some idea of how well you will be heard elsewhere as compared to a lower power and, if the transmit power is known, let you calculate the gain of the antenna. One can also plunk EIRP into some of the propagation modeling software (my favorite free one is at http://elbert.its.bldrdoc.gov/hf.html, get the HFWIN32 software; it is great!). I guess you takes your choices; you generally need at least two parameters, ie EIRP and applied power, or applied power and antenna gain, or EIRP and antenna gain, EIRP and distance, etc., to be able to do anything useful. It is sorta' like the relationship between receiver noise floor, dynamic range and intercept point. You need to know any two of the three parameters to be able to characterize the receiver.

> Sure hope someone can show I am using it right:-)!

If I can find the time, Chip, I can take a look, but I imagine you are. Your statement relating it to field strength was certainly intended to be a simplification. I am merely choosing to expand upon it.

73,
Ed Hare, W1RFI

2449. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8q8q8c$o77$1@nnrp1.deja.com>
Source record: 180311

In article <20000919081308.06614.00000259@ng-cc1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> EIRP= power to antenna times peak field strength (call it directivity
if you
> wish, some herehave been using the term wrong abd calling GAIN the
same as
> DIRECTIVITY)

Actually, EIRP is the power at the antenna times the gain of the antenna
referenced to an isotrope. If you prefer dB's, it's dBm + dBi.
Hope this helps. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2450. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C7E7D6.3A0CC94A@uci.edu>
Source record: 180312

Fractenna wrote:
>
> >Yeah. What number do you use for the amount of power you're sending to
> >the antenna?

> Read the posts you dodo.

> Why should Dr. Cohen repeat his stuff for lazy people like you?

> Phil
> de N1ZKT

Who is this adolescent Phil person that is speaking to me? Your behaviour, sir, is uncalled for. I'll thank you not to address me in that fashion. Now go home and wash your mouth out, and don't presume to speak for the Great Dr. Cohen.

:-)

(For anyone still awake, this bruhaha arises out of the fact that the aforementioned fellow claims, inaccurately, to have published the EIRP for his station, not only here on the newsgroup, but implies that it can be found on his web page.)

Infinite Best Regards (+10 dB.....or is it 20), AC6XG

2451. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <ORRx5.699$u95.2243991@news.ntplx.net>
Source record: 180313

VE9SRB <srbest@worldnet.att.net> wrote:

> I did not see the posts where someone stated that directivity and gain were
> the same thing. This would only be true if the antenna had 100% efficiency.
> I did however see the posts where the performance of two antennas were
> compared and directivity was one of the comparison factors. In this
> comparison both antenna had virtually identical radiation and loss
> resistance so a comparison of directivity was an acceptable indication of
> relative performance.

If I were comparing antennas that I believed would be virtually identical loss, I would probably model them as lossless, just to get a fast idea of the relative gain between the two. I just ran an EZNEC model of a 20-meter Yagi with 1" diameter elements, comparing the gain with zero loss elements and aluminum elements. The difference was 0.02 dB. If I were using EZNEC, I would probably just use the wire loss function and be "real," but if I were modeling in "native" NEC, I would skip it; it is too much work for 0.02 dB, and I expect that, unless one antenna being compared is expected to be lossy, the actual difference between the two would be less than that.

It is kind of like the old question; imagine you are standing 10 feet away from the most beautiful woman in the world, and every minute, you halve the distance between you. How long will it be before you meet? The correct answer is not, "You will never meet." The correct answer is that after about 30 minutes, you will be close enough for all practical purposes. :-)

73,
Ed Hare, W1RFI

2452. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <CURx5.700$u95.2244599@news.ntplx.net>
Source record: 180314

Fractenna <fractenna@aol.com> wrote:

> Read the posts you dodo.

> Why should Dr. Cohen repeat his stuff for lazy people like you?

> Phil
> de N1ZKT

I'm confused; who is Phil posting from the Fractenna account? Seems an entirely different style.

73,
Ed Hare, W1RFI

2453. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C7EB94.48D575F4@bigfoot.com>
Source record: 180315

Reg Edwards wrote:
> There's no way I can win !

What do you expect from an Englishman who doesn't use
English units? :-)
--
http://www.mindspring.com/~w6rca

2454. Stacked antennas/noise shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39C7F7DA.6AFA4965@fgi.net>
Source record: 180316

Gentlemen,
Discussions in an older Antenna Handbook regarding
stacked antennas state that they are not as good as
monobanders when looking at rear radiation but do point
to the advantage of the 'noise shielding' provided by the
upper antenna in inclement weather.

Has there been any info published as to why this is
so? Guesswork?
Have any methods been used to simulate this shielding
effect with single antennas?
Large capacity cap on tower top to ground get the job done?
Comments appreciated
Art Unwin KB9MZ

2455. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919192529.07950.00000012@ng-fl1.aol.com>
Source record: 180317

>Fractenna wrote:
>>
>> >Yeah. What number do you use for the amount of power you're sending to
>> >the antenna?
>
>> Read the posts you dodo.
>
>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>
>> Phil
>> de N1ZKT
>
>Who is this adolescent Phil person that is speaking to me? Your
>behaviour, sir, is uncalled for. I'll thank you not to address me in
>that fashion. Now go home and wash your mouth out, and don't presume to
>speak for the Great Dr. Cohen.
>
>:-)
>
>(For anyone still awake, this bruhaha arises out of the fact that the
>aforementioned fellow claims, inaccurately, to have published the EIRP
>for his station, not only here on the newsgroup, but implies that it can
>be found on his web page.)
>
>Infinite Best Regards (+10 dB.....or is it 20), AC6XG

Actually Jim, this is a problem you have. I really don't have time to accommodate your personal requests, ESPECIALLY since anyone who reads the posts will already have the info.

Best I can tell, the objective is to tie me into some annoying infinite time sink with malcontents.

Nope. Forget that.

So, if you want to be annoying, try someone else. I'm sure Phil will annoy you right back if he thinks it would help.

73
Chip N1IR

2456. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919192951.07950.00000013@ng-fl1.aol.com>
Source record: 180318

>Fractenna <fractenna@aol.com> wrote:
>
>> Read the posts you dodo.
>
>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>
>> Phil
>> de N1ZKT
>
>I'm confused; who is Phil posting from the Fractenna account? Seems an
>entirely different style.
>
>73,
>Ed Hare, W1RFI

Then do your research and discover for yourself.

Or is the ARRL particularly interested in the screenname of fractenna@aol.com
for some reason?

What reason?

NC

2457. Re: Shock Jock Freak list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919193257.07950.00000014@ng-fl1.aol.com>
Source record: 180319

>:If I didn't join the self help group I would post the following:
>
>:Sorry group, it will never happen again
>
>Yuri, in the self help group we never say never.
>We just try one day at a time.
>
>--
>Gilbert.
>Far away from recovery today. Tomorow is an other day.
>

Go take a flying freak at the mooooon.

badadadumb

Phil
de N1ZKT

2458. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <cLSx5.703$u95.2247614@news.ntplx.net>
Source record: 180320

Bart Rowlett <bart@wb6hqk.ampr.org> wrote:

> > >The Windom is no better nor worse than most other sorts of
> > >simple wire antenna in that it radiates nearly all the power
> > >which is put into it - even on 15m. You've been listening
> > >to the wrong old-wives' tales.

> > I respectfully disagree. The Windom functions as a loaded random wire,
worked
> > against earth ground. The single-wire "feed line" is actually the part
of the
> > antenna that does the majority of the radiation. The "feed line"
generally
> > will not radiate as efficiently as would an antenna at the same height
as the
> > top section, due to losses in buildings, etc.

> At it's primary design frequency, the classic Windom operates as a
> horizontal half wave dipole.

I stand mostly corrected. I had based my statements on the windom on what I recall Jerry Hall, K1TD, telling me about some of the modeling he had done years ago. I just ran the EZNEC model of a windom and, broadside to the antenna, there is significant horizontally polarized field. In the exact circumstances I chose, the V component was down about -15 dB.

> The single wire vertical feedline operates substantially without standing
waves

Appears to be true, when the antenna is cut to the formula and operated at resonance. When I had a half-wave feeder, though, the "SWR" on the line jumped to about 3.5:1 when I modeled the Windom cut for 3.75 MHz on 3.5 MHz or on 7 MHz. I didn't experiment with the tap point much, though; I just used a 130 foot flat top, tapped 47 feet from one end. Didn't try other bands.

> The operating impedance of the feedline is in the neighborhood of 600 -
900 ohms

The model predicts 508-j412 ohms for a quarter wave feeder and 233+j209 for a half-wave feeder. This would still make the statement generally true.

> making the ground losses associated with the feedline generally small
compared to the the losses
> associated with the 1/4 wl high horizontal dipole radiator.

I am not sure what losses would be associated with the quarter wl high half-wave dipole radiator. With w pretty good ground (a 0.25 lambda buried vertical wire), EZNEC with the NEC-4 engine gives me about 5 dBi gain for the Windom, straight up, *off the the end* about 1.25 dBi gain for the Windom broadside and 6.29 dBi gain for the half-wave dipole, now modeled over average ground. I did see some intersting patterns wrt hte ends of the antenna. :-)

> The Windom is a mechanically robust, elegant design suitable one or two band
> operation, but probably not a good choice in a cluttered environment
> where the common mode feedline current is likely to pick up stray RFI.

Yes, ALL the current on the feedline, about 2 A for 1 kW input on 80 M, is common-mode. :-)

> > The Z at the end of that "feed line" is difficult to predict. This can
> > generally be matched with a good antenna tuner, though.

> When the system is properly adjusted, the feedline operates
> substantially free of standing waves and the impedance at the
> transmitter end of the feeder will be between 500 and 1200 ohms,
> primarily dependent on wire size. Significant deviation is a sure sign
> the antenna is not properly adjusted.

By adjustment, do you mean that the tap point is adjusted? That could explain some of the differences.

> The primary downside of the classic Windom is that it is a narrowband
> antenna with a high impedance feed. If not adjusted properly, or
> operated more than a few percent off it's design frequency, the vertical
> feeder does indeed become a significant part of the radiating system.

Could explain the rest of the differences. :-)

Thanks for the chat; I learned something.

73,
Ed Hare, W1RFI

2459. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <ZNSx5.704$u95.2247612@news.ntplx.net>
Source record: 180321

Tom W8JI <2w8ji@contesting.com> wrote:

> The truth is, it's hard to tell the difference between a 5dB gain
> antenna and a zero dB gain antenna unless signals are marginal or
> noise is high.

True enough, but hams often try contact with marginal S/N ratios. About half of my QRP contacts are made with a S/N ratio of about 0 dB in 500 Hz receive bandwidth.

> On ten meters, or even twenty meters, it's pretty easy to work almost
> every country available with persistance even with very low ERP. It
> takes more time than station.

True indeed. My best W1/Europe QSO was made on 20 meters with an EIRP of about 10 dBm!

73,
Ed Hare, W1RFI

2460. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <0YSx5.705$u95.2248226@news.ntplx.net>
Source record: 180322

<klocko@toad.net> wrote:

> Actually, EIRP is the power at the antenna times the gain of the antenna
> referenced to an isotrope. If you prefer dB's, it's dBm + dBi.

Just as a few points of clarification, it would be equally valid for any other expression of power, such as dBW, etc. It is also the power fed to the antenna terminals, not the power of the transmitter, unless you also factor in feed line loss.

Also, that dBi reference is for the gain of the antenna in situ; ie, over ground, with any other attenuations factored (loss through buildings, etc.)

As a last point of reference, over "average" ground, a half-wave dipole up a half-wavelength has a gain of about 7.8 dBi. Very interestingly, this is a gain of about 5.2 dBd. So a half-wave dipole over real ground really does have a gain of 5.2 dB compared to a half-wave dipole. :-) This is, of course, because the term dBd is a half-wave dipole in free space. This causes no end of confusion when some compare an antenna gain to a dipole at the same height and call the result dBd. The terms dBi and dBd really are mathemetical constructs.

73,
Ed Hare, W1RFI

2461. Re: End fed imedance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8u76gab1@neptunium.btinternet.com>
Source record: 180323

What an unnecessarily complicated job you are making of it.

Download in a few seconds program ENDFEED from my website.
Not zipped up. Run immediately. No six week course of
instruction on how to use it is needed. Input data on a
"what-if?" basis. Get yourselves into the 21st century.

Just enter simple antenna and ground system dimensions. It
will not only tell you, within milli-seconds, antenna
feedpoint input impedance, R and jX , it will also tell you
the L and C component values for the antenna-transmitter
matching network.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

R.P.Haviland <bobh@iag.net> wrote in message
news:7sQx5.3330$Xo6.157624@news-east.usenetserver.com...
>
> Mak wrote in message
<8pvubpnir1@neptunium.btinternet.com>...
> >Gentlemen, your estimates please on the impedance of my
proposed HF
> >aerial:-
> >You can approximate the end fed impedance by using NEC or
one of its
> derivates. Start with a modest number of segments, and
derive the impedance
> driven one segment from the end. Increase the number of
segments and again
> get the impedance one segment from the end. Repeat to the
limit of the
> program, Plot the impedance vs the number of segments.
extrapolate to
> infinite segments by eye.
>
> You can get another estimate by mirror imaging the
antenna in free space,
> connecting these by 3 short segments. the feed impedance
at the middle
> segment is of the order of twice the end impedance.
> bob w4mb
>

>

2462. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Z1Tx5.706$u95.2248391@news.ntplx.net>
Source record: 180324

Fractenna <fractenna@aol.com> wrote:

> >I'm confused; who is Phil posting from the Fractenna account? Seems an
> >entirely different style.

> Then do your research and discover for yourself.

It was only idle curiosity, Chip; if you have a reason to want to keep it a secret, I really don't mind.

> Or is the ARRL particularly interested in the screenname of
fractenna@aol.com
> for some reason?

> What reason?

It was only idle curiosity, Chip (I assume NC is Chip, but if there are multiple users sharing the same AOL screen name, please accept my apology.) Why would you think that my question could represent an organizational interest by ARRL? The normal usenet convention is that people do not post the views of their employers; their participation is personal. There is no reason that does not apply here, Chip, and to help make that point, I deliberately do not include ARRL in the Organization: line or in my sig. The fact that this post does originate from arrl.org is probably found in some of the headers, but I make no bones about that either way.

It would be no more correct for you to assume that ARRL has an interest in the screenname fractrenna@aol.com than it would be for people to assume that Fractenna feels it has somthing to hide by your not answering my question.

I must say that your reaction to my question was a bit unexpected. If this is a sore point with you, I will not trouble you with it again.

73,
Ed Hare, W1RFI

2463. Re: Stacked antennas/noise shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C802A4.2D7B@wt.net>
Source record: 180325

Arthur Unwin wrote:
>
> Gentlemen,
> Discussions in an older Antenna Handbook regarding
> stacked antennas state that they are not as good as
> monobanders when looking at rear radiation but do point
> to the advantage of the 'noise shielding' provided by the
> upper antenna in inclement weather.
>
> Has there been any info published as to why this is
> so? Guesswork?
> Have any methods been used to simulate this shielding
> effect with single antennas?
> Large capacity cap on tower top to ground get the job done?
> Comments appreciated
> Art Unwin KB9MZ

I'd never really heard of that on stacked antennas, but I guess it could work much the same way as the "static hats" that you see on the top of some verticals. I remember alot of older 5/8 CB ground planes used to use these. How well they work, I dunno, but I think they do help a little. A large ball would be better to my way of thinking. Unless maybe they are refering to a "non static related noise. MK
--
http://web.wt.net/~nm5k

2464. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C80390.883A1FF2@uci.edu>
Source record: 180326

Fractenna wrote:
> Actually Jim, this is a problem you have. I really don't have time to
> accommodate your personal requests, ESPECIALLY since anyone who reads the posts
> will already have the info.

Really. I believe W1RFI was the first to ask for it. How do you find
it believable that people are responding to posts they don't read?
Also, please consider the fact that it takes no more time to answer a
question than it does to make insulting and condescending remarks to
them.

73, Jim AC6XG

2465. Re: NEC4 Model of Helically Wound Loop Re: MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c806c8.59205771@news.akorn.net>
Source record: 180327

On Tue, 19 Sep 2000 12:45:04 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>I have been assuming that the loss resistance and radiation resistance are
>both known quanities at the defined feedpoint.

Let me ask a question.

When you calculated efficiency, did you plug a conductor resistance
into NEC and let it normalize the loss resistance to the feedpoint?

What I'm trying to ask is how you determined the amount of feedpoint
impedance due to radiation resistance and the amount due to loss.

73 Tom

2466. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c808d6.59731701@news.akorn.net>
Source record: 180328

On 19 Sep 2000 21:53:30 GMT, fractenna@aol.com (Fractenna) wrote:

>2) W8JI's hoax--in which he claimed the fractal was so inefficient that it
>burned his grassland from starting a fire.

That's true! My only try at a Fractal resulted in a fire!

The RF was so confused trying to twist and turn its way around all the
weird shapes, it lept across an insulator and set a field on fire!!!

Warning! Never use Fractals at high power over dry grass!

73 Tom

2467. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C8116B.D4ECFE@hiwaay.net>
Source record: 180329

Ed- Dont worry, Chip does this often. When He feels like being nasty or vulgar, he posts as "Phil". It is not dignified for an assistant prof at a small Boston Metropolitan college to indulge in such, so he uses the "nom-de-crap" of Phil.

It is a matter of record that he has used MANY such alter-names, but only "Phil" has had much continuity. In some cases, he has actually carried on cross-postings with himself, apparently to get questions he expected but were not forthcoming.

If you dont believe me- ask Tom, Richard, Peter, or any of several other regulars here.

Bill-W4BSG

"Ed Hare, W1RFI" wrote:
>
> Fractenna <fractenna@aol.com> wrote:
>
> > Read the posts you dodo.
>
> > Why should Dr. Cohen repeat his stuff for lazy people like you?
>
> > Phil
> > de N1ZKT
>
> I'm confused; who is Phil posting from the Fractenna account? Seems an
> entirely different style.
>
> 73,
> Ed Hare, W1RFI

2468. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <1l4gssg5h3q1lontmfhhnjduf3dco3g6bo@4ax.com>
Source record: 180330

On or about 19 Sep 2000 18:51:16 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:Look at the ham page
:
:http://www.fractenna.com/ham/hampage1.html

I did
:
:and be a goody dooby and tell us what is wrong or misleading or just plain
:inaccurate about the performance the relative advantages or anything else.
:Go ahead and do everyone a favor and tell them what is wrong.

He compares apples to oranges. Comparing a dipole with no
reflector/director to a yagi fractal antenna is like comparing a bb
pistol to an AR-15; They're kindof the same thing, but not really

:From what I've seen of other ham antenna web pages this is perhaps the best
:documented antenna from a performnace and modeling standpoint on the web.

Not really. Like has yet to be compared with like.

:Dr. Cohen should be getting major kudos for helping hams out. Not stupid
:idiotic crap like this from a few jerks.
:
:Phil
:de N1ZKT

Chip might have something with the particular arrangements of these
fractals, however, he has yet to provide comparative data that
actually means something.

Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
meter FQY, or a single element fractal dipole with a standard dipole,
or a single element 1/4 wave fractal vertical with a single element
1/4 wave standard vertical antenna. Then we'd have some meaningful
comparisons to judge from.

Just my two cents.

-SSB

2469. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <4d5gsskb5vo70i1so8l69g050alal0ojvs@4ax.com>
Source record: 180331

Funy thing....

Until Phil showed back up, I was starting to actually think there was
some small merit to Chip's particular antennae. Now, I'm not so sure.

::shrug::

Talk about shooting yourself in the foot.

-SSB

On or about 19 Sep 2000 23:25:29 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>Fractenna wrote:
:>>
:>> >Yeah. What number do you use for the amount of power you're sending to
:>> >the antenna?
:>
:>> Read the posts you dodo.
:>
:>> Why should Dr. Cohen repeat his stuff for lazy people like you?
:>
:>> Phil
:>> de N1ZKT
:>
:>Who is this adolescent Phil person that is speaking to me? Your
:>behaviour, sir, is uncalled for. I'll thank you not to address me in
:>that fashion. Now go home and wash your mouth out, and don't presume to
:>speak for the Great Dr. Cohen.
:>
:>:-)
:>
:>(For anyone still awake, this bruhaha arises out of the fact that the
:>aforementioned fellow claims, inaccurately, to have published the EIRP
:>for his station, not only here on the newsgroup, but implies that it can
:>be found on his web page.)
:>
:>Infinite Best Regards (+10 dB.....or is it 20), AC6XG
:
:
:Actually Jim, this is a problem you have. I really don't have time to
:accommodate your personal requests, ESPECIALLY since anyone who reads the posts
:will already have the info.
:
:Best I can tell, the objective is to tie me into some annoying infinite time

:sink with malcontents.
:
:Nope. Forget that.
:
:
: So, if you want to be annoying, try someone else. I'm sure Phil will annoy you
:right back if he thinks it would help.
:
:73
:Chip N1IR

2470. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <18152-39C811FB-104@storefull-115.iap.bryant.webtv.net>
Source record: 180332

I wrote 620, 670, and 650 KHz are other possibilities.

850 is occupied by KOA Denver and I thought Rick, KD6QZD said it was also a local frequency he said he could hear weakly at times during daytime hours.

I may have misread something. 650 KHz is shown on my old FCC charts as KPOA Honolulu at 10 KW non-directional. It shares the frequency with WSM an old clear channel 50 KW in Nashville and several other regional stations the FCC has allowed to co-exist on the former clear channel.

The good news is that the FCC chart shows KPOA`s coverage area just reaching the shores of the big island of Hawaii. That would mean that with some effort 650 KHz from Honolulu might be received in Rick`s location.

Best regards, Richard Harrison, KB5WZI

2471. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <qa6gssk8brrve26lr4u9qoabt741mo0isp@4ax.com>
Source record: 180333

Ed:

Did you really expect anything different?

I sure didn't.

-SSB

On or about 20 Sep 2000 01:44:20 GMT, w1rfi@aol.com (W1RFI), using the
forum rec.radio.amateur.antenna did say:

:>From: fractenna@aol.com (Fractenna)
:
:>Door. close. bridge. burn. Liason. History.
:
:Hmmm, a big difference in the dish-out vs take tolerance, eh? :-)
:
:73,
:Ed Hare, W1RFI

2472. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <39c8232c_3@news1.prserv.net>
Source record: 180334

Gary et al:
This is just the tip of the iceberg, unfortunately. Spread Spectrum is not LPI, only with narrow band search equipment. Put a good analog spectrum analyzer on it. What you see is all energy in the passband. And, energy in the passband = interference.

--
Crazy George

Gary Coffman <ke4zv@bellsouth.net> wrote in message news:rahdss8u1hgdsl1sq7vljum5o69uk5m4eq@4ax.com...
> On 07 Sep 2000 12:18:53 GMT, w1rfi@aol.com (W1RFI) wrote:
> >I very much want to hear any and all reports of interference to hams from Part
> >15 devices. Two ARRL Board committees are studying the problem and I want to
> >send them any actual cases.
>
> One of our local hams has 2.4 GHz wireless LAN products in use in his home,
> and also 2.4 GHz cordless phones. Both use spread spectrum, of course, and
> neither interferes with the other to a noticable extent. But, now comes wireless
> broadband provided by AT&T (ex-Media One). Their provider site is less than
> half a mile (line of sight) from his home. Now his phones suffer severe interference,
> and the wireless LAN retry rate is noticably increased.
>
> So far, no ill effects have been noted to his HF, VHF, or UHF amateur operation.
> BTW his amateur operations haven't bothered his cordless phones or wireless
> LAN or vice versa. If they are now bothering his neighbors who use the wireless
> broadband distribution, no one has yet complained to him about it.
>
> At the site of the wireless broadband provider are amateur radio repeaters
> and television remote broadcast microwave links (for picking up the signals
> of remote TV broadcast vans and relaying them back to the studio). On one
> amateur UHF repeater (443.025), a buzz, which was not there before, can
> now be heard under weaker signals. (Possibly a fundamental overload problem,

> though a good pass/reject duplexer is used, and no current problems exist
with
> the over 100 other transmitters on the site, paging, cellular, LMR, LPTV,
etc.)
> This hasn't significantly impacted operation, but it is a nuisance that
has resisted
> attempts to suppress it.
>
> Interference to the TV remote broadcast microwave link receiver is much
more
> severe. Hits can be seen periodically in the video, especially when using
vertical
> polarization. (The wireless broadband transmit antenna is vertically
polarized.)
> As a practical matter, the site is now useless for vertical, LHCP, or RHCP
reception,
> and has had to be restricted to only horizontal polarization to avoid
significant
> signal degradation. This is a fairly serious limitation because CP is the
preferred
> polarization to resist multipath (IE ghosting) of the signals from the
remote vans.
> Attempts to resolve the problem have so far been fruitless.
>
> It would appear that wireless broadband may not be as good a spectrum
neighbor
> as has been portrayed, especially if one is near the source of the
transmissions.
> But at least the impact on amateur operations on popular bands seems to be
minimal.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

2473. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3120-39C8232B-13@storefull-117.iap.bryant.webtv.net>
Source record: 180335

Tom, W8JI wrote: "Nonsense. Everyone who uses a Beverage understands they have negative gain."

According to Terman in his 4th edition of "Electronic and Radio Engineering", page 871, the gain as a power ratio (not db) of a nonresonant wire 2 wavelengths long is 6.5 when compared with an isotropic radiator. (a power ratio of 4 is 6 db and a power ratio of 8 is 9 db)

If this wire of 2 wavelengths is brought close to the ground it will experience loss imposed by the soil`s imperfections. The soil is neither a good conductor nor a good insulator. The severity of the loss depends on the exact soil composition and how near the wire is placed to the soil. The soil will eat away at the gain and directivity of the wire.

Some Beverage antennas will retain some gain when close to the ground. Some will not. It is simply a matter of whether the difference between the antenna gain and the ground loss is a positive number.

Best regards, Richard Harrison, KB5WZI

2474. Re: Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39C82067.420C@rpi.edu>
Source record: 180336

Mogens wrote:
>
> The butternut hf6 if you want dx.
>
> It's one of the cheapest.
>
> No loss due to traps.
>
> No earth loss due to missing ground plane or ground wires. (You have to make
> a proper ground wire system, or when it's in the air a radial system.)
> Remember that every vertical must HAVE a radial system. Those sold without
> are expensive dummy loads :-)
>
> Almost full antenne lenght on every band giving the highest possible
> radiation resistance. On 10m its working with the full 29ft/7.9m (equal to
> 3/4 Wawelenght) On a trap vertical the effective lenght is typical a 1/4
> wavelenght.
>
> Mogens
>
> "Sam" <sam_a_34@yahoo.com> wrote in message news:39c238d5$1@news...
> > What commercial vertical antenna, 10-20 meters do you all recommend and
> why?
> >
> > Sam
> >
> >

I agree - this is a great antenna!

Curt Breneman
RPI Chemistry
KC2EBP

2475. Re: Cheap MW antenna (low band)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <dWVx5.192$fU3.12579@news1.mts.net>
Source record: 180337

Frazier:

You might find these links helpful.

http://home.inforamp.net/~funk/page6.html

http://www.carcanada.net/dx/donloop.html

http://www.mindspring.com/~brucec/amloop.htm

http://user.netonecom.net/~swordman/Radio/shloopant.htm

This one deals with longwave....below the AM broadcast band....but has some good tips for you... http://lwca.org/library/rcvg-lib.htm

Radio Australia's Medium Wave Loop Antenna Plans
http://www.carcanada.net/dx/loop1.html

I found these in a few minutes by entering BCB Loop antenna in the Alta Vista Search Engine.

Final suggestion I can offer is the radio....I don't recall your mentioning what receiver you are using, but I can recommend the GE Superadio 3 as being a good performer for the money spent....and it also has terminals for external antennas to be attached, so the loops work well with this combination. Here are a few links to the Superadio 3 sites. If you look around on the net, there are places where they sell factory refurb and repacks for about $40....a particularly good deal for the dollar spent.
http://www.grove-ent.com/RCV5.html

This radio is not perfect however, and while it has very good performance for the dollar, you will find the reviews and FAQs for the Superadio at:
http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html

I'm sure you will get some excellent infomation from these sites, and the people who run them. This should keep you busy on the web for awhile!

Regards,
Lee Smith
VE4ANC

2476. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q9b6c$16a$1@iac5.navix.net>
Source record: 180338

Phil, may I suggest an autoerotic experience...

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message
news:20000919150016.15866.00003232@ng-md1.aol.com...
> >Yeah. What number do you use for the amount of power you're sending to
> >the antenna?
>
> Read the posts you dodo.
>
> Why should Dr. Cohen repeat his stuff for lazy people like you?
>
> Phil
> de N1ZKT

2477. Re: Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Fredric J. Einstein" <feinstei@mw.mediaone.net>
Message-ID: <5vbgss4nen9kl9i0rhd47t2nnnb9m3nu8f@4ax.com>
Source record: 180339

>Mogens wrote:
>>
>> The butternut hf6 if you want dx.
>>

I feel that if you only want 80 and 40, you're best off with the
Butternut HF-2V. I have found it to be 2 S units better then the
HF-9V on these two bands.

To educate yourself on verticals, I'd go to Butternut's web site.
They have a complete set of manuals, which have very good descriptions
of radial systems which should answer all of your questions.

I also have an MFJ-1798 (one of those "radial-less half-wave"
verticals that covers 80 through 2 meters). It is truly a compromise,
but does work if you can't have a radial system. It also feeds back
a LOT of RF into the shack, so you need to buy a Radio Works Line
Isolator and a couple of Radio Shack 8' grounding rods to get rid of
this RF with the MFJ or Cushcraft.

Fred

2478. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C8336F.EF265AE4@hiwaay.net>
Source record: 180340

Now, THAT was good-
(I wish I had thought of that particular, short, pungent reply.)
Bill

W4JLE wrote:
>
> Phil, may I suggest an autoerotic experience...
>
> --
>
> Fred W4JLE
> http://w4jle.com/
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000919150016.15866.00003232@ng-md1.aol.com...
> > >Yeah. What number do you use for the amount of power you're sending to
> > >the antenna?
> >
> > Read the posts you dodo.
> >
> > Why should Dr. Cohen repeat his stuff for lazy people like you?
> >
> > Phil
> > de N1ZKT

2479. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39C81935.3E76@pacbell.net>
Source record: 180341

Richard Clark wrote:
> >
> >One of the most popular replacement antennas used on consumer type
> >radios and tvs over the years has been the good old
> >wire coat-hanger. People use them and get better reception
> >than if they used nothing at all, but no one has ever argued
> >that coat-hanger antennas are optimum in any sense other than being
> >readily available.
> >
> >Tom Donaly KA6RUH
>
> Hi Tom,
>
> You neglected that with that particular style of antenna, the most
> popular optimization employs crumpled (dare I say fractalized?) tin
> (aluminum/aluminium) foil balls at the ends.
>
> Every kid in America (before cable) learned optimization first hand.
> It is only because of cable that this art has died and discussion of
> the optimized coat-hanger has fallen into decline.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
the form still exists. Around here (California), it
has degenerated into straightening out the hook, bending the
rest into a diamond shape, and then attaching the result to
what's left of your car's radio antenna which had been lately broken off
by the fellow whose parking spot you took. I remember the aluminum
foil. I used it myself, on occasion, but could never quite get
the hang of it.

Tom Donaly KA6RUH

2480. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C839EC.39AA1FE1@bigfoot.com>
Source record: 180342

Brian Kelly wrote:
>
> CAM wrote:
> > I avoid the super high SWRs by making my dipoles
> > 1/2WL at the lowest frequency of operation.
>
> But look out on it's second harmonic freq . .

Nope, not true. Let's say such an antenna has a feedpoint impedance of
6k ohms. That's an SWR of 13:1 using 450 ohm ladder-line and the impedance
at a current maximum with an SWR of 13:1 is 35 ohms resulting in a 50 ohm
SWR of 1.4:1. Making the dipole 1/2WL on the lowest frequency of interest
avoids a multitude of problems.

The problem with dipoles less than 1/2WL is that the resistance goes down
and the reactance goes up causing the SWR to increase without bounds.
For dipoles of 1/2WL or longer, the resistance and reactance track to
a certain extent so the maximum SWR has an acceptable upper limit.

> > In general, that limits the
> > impedances encountered to a donut on the Smith Chart with SWR limits
> > between 4.5:1 and 18:1 for 450 ohm line. I then install the 1:1 balun/
> > choke at the current maximum point, i.e. zero reactance point.
>
> 80-10 including the WARC freqs??

Yes, definitely. The impedances at the transmitter vary between 25 ohms
and 100 ohms on all bands 80m-2m which gives 50 ohm SWRs less than 2:1
on all HF bands plus 6m and 2m with no tuner required.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2481. Building helical antenna to span 470 to 850MHz (UHF TV)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <39C83BD0.36C1443B@ix.netcom.com>
Source record: 180343

Any ideas on how to build a helical antenna that can cover this
wide of bandwidth? 470 to 850MHz (UHF TV channels 14 -69).
Looking at the ARRL Handbook, 1978 edition, page 635 is
a helical antenna for 432MHz. "Each turn is a wavelength long,
with a pitch of 1/4 wavelength". Now could I build a helical
with varying diameters of the turns? Imagine I have a cone
that I wind the turns on, starting at a 4 inch diameter and
tapering up to 8 inches. And the wire of the antenna spirals
around the cone, the turns getting bigger as the cone gets
wider. And then the base of the cone sits on a screen mesh.

Would this work, give me some directionality and gain,
and bandwidth? Figure it would feed 75 ohm coax to feed
the TV set UHF tuner.

2482. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C83DD7.594D5B1F@bigfoot.com>
Source record: 180344

Reg Edwards wrote:
>
> Dear Cec,
> There's nothing wrong with 16 feet.

It was a joke, Reg. Did you see the smiley face?

> But I do see what you have in mind. Another 16 feet on each
> end would take the antenna into the G5RV region where a
> tuner might be dispensed with and the system tuned up by
> adjusting the length of the ladderline.

Actually, the G5RV length has too high an SWR to use the line alone for tuning on 75m. It takes a parallel capacitor to twist the impedance to 50 ohms. That's why I use a 130ft dipole.

> There's a blind operator near me who has a low dipole. It is
> resonant somewhere between 80 and 160m. The dipole centre
> passes by the shack (his bedroom) window. Feeder length is
> about 6 feet to the tuner. He has no worries about swr on
> the feedline which is open wire spaced at 5 inches.

And thus his tuner has to do all the work. My transmission line does all the work and I don't have to spring for a 500w tuner.

> I hear there's a continuing drout in Texas. Is it something
> to do with global warming ? It can't be doing your ground
> system much good.

We got no rain during July and August but have gotten over three inches so far in Sept. Signals are definitely better after a rain. And this planet had global warming long before manmade greenhouse gases. The temperature S/N ratio is so low we won't know one way or the other in our lifetimes.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2483. Re: Q: best wire using a tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C83F35.D6CDA57C@bigfoot.com>
Source record: 180345

Korinna & Peter wrote:
> How should I install a wire to get best results on as many as possible
> bands.

I helped a ham with such an antenna and he was very pleased with the results. He had an A-frame attic and installed large end hats on his short dipole. Worked like a charm for all-HF-band operation. Here's my previous posting on the subject.

You know how top hats work on mobile antennas? Well they can work just as

well on attic antennas. In fixed font, it looks like:

```
/\ /\

/ \ / \

/ \ / \

/ +--\------------------FP------------------/--+ \

/________\ /________\
```

The hardware cloth triangles are cut to occupy the available A-frame

space and mounted on stand-off insulators. The ends of the dipole are

attached to the center of the hardware cloth capacitive hats. The

dipole feedpoint is in the center. If this is to be an all-HF-band

antenna, the feedline needs to be ladder-line.

--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2484. Re: Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Mogens <petsen@lazy.dk>
Message-ID: <8q78l1$r1i$1@news.inet.tele.dk>
Source record: 180382

The butternut hf6 if you want dx.

It's one of the cheapest.

No loss due to traps.

No earth loss due to missing ground plane or ground wires. (You have to make a proper ground wire system, or when it's in the air a radial system.) Remember that every vertical must HAVE a radial system. Those sold without are expensive dummy loads :-)

Almost full antenne lenght on every band giving the highest possible radiation resistance. On 10m its working with the full 29ft/7.9m (equal to 3/4 Wawelenght) On a trap vertical the effective lenght is typical a 1/4 wavelenght.

Mogens

"Sam" <sam_a_34@yahoo.com> wrote in message news:39c238d5$1@news...
> What commercial vertical antenna, 10-20 meters do you all recommend and why?
>
> Sam
>
>

2485. FA: US Tower TX489MDPL 89ft Motorized Crank-Up 3 days!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <39C6E529.FD23FAF1@nettally.com>
Source record: 180383
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

Monster Tower!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=438969842

This is the "Hummer" of freestanding towers. To call it a "crank-up" is a misnomer. All you have to do is flip a toggle switch and sit back in your patio chair and sip your beer. You will have plenty of beer left over once the 1HP motor finishes smoothly raising the tower!

I am selling at considerable loss as I am contemplating a move and removal will simplify the sale of the house. (unless of course you are looking for a 3BR 2BA ranch with 2 car garage on 2 acres in a semi rural, antenna friendly subdivision? If this is a case, drop me a line, maybe you can get a "free" tower, installed!.)
--
Joe Leikhim K4SAT
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

Dopeler effect: The tendency of stupid ideas to seem smarter when they come
at you rapidly.

2486. Re: Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: k4sqr@my-deja.com
Message-ID: <8q7csssi1@nnrp1.deja.com>
Source record: 180384

In article <39c238d5$1@news>,
"Sam" <sam_a_34@yahoo.com> wrote:
> What commercial vertical antenna, 10-20 meters do you all recommend
and why?
>
> Sam
>
>
Sam;

The Hy-Gain AV-620 because it does not have any traps. (The R-6000
does.)

73
Jim

Sent via Deja.com http://www.deja.com/
Before you buy.

2487. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919054400.12575.00000125@ng-ff1.aol.com>
Source record: 180385

>From: fractenna@aol.com (Fractenna)

>I will send you every single e-mail, post, and so on that I originate and you
>can edit . How's that?

Please don't.

>If not, don't act like such a wise &&&.

Pot, kettle, black...

73,
Ed Hare, W1RFI

2488. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919055159.12575.00000127@ng-ff1.aol.com>
Source record: 180386

>From: "Reg Edwards"

>The Windom is no better nor worse than most other sorts of
>simple wire antenna in that it radiates nearly all the power
>which is put into it - even on 15m. You've been listening
>to the wrong old-wives' tales.

I respectfully disagree. The Windom functions as a loaded random wire, worked against earth ground. The single-wire "feed line" is actually the part of the antenna that does the majority of the radiation. The "feed line" generally will not radiate as efficiently as would an antenna at the same height as the top section, due to losses in buildings, etc.

The Z at the end of that "feed line" is difficult to predict. This can generally be matched with a good antenna tuner, though.

The antenna's performance also depends on ground losses. This can be somewhat offset by the use of a ground radial system, but that seems like a lot of work to use an antenna that is generally used because it appears to be easy to build and use.

If it were me, I would elect to feed that top section with ladder line, fed either at the center or offset, and use my antenna tuner to bring it all to resonance.

73,
Ed Hare, W1RFI

All

2489. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919055936.12575.00000128@ng-ff1.aol.com>
Source record: 180387

>From: fractenna@aol.com (Fractenna)

>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
>my Sb220 and 10M FQY is flawed.

I may have missed it, Chip; did you post the methods you used to calculate the EIRP in the first place? I am especially curious about the gain of the antenna and by what generally accepted method it was derived (NEC model, calibrated antenna range, etc.) I think from there, the competent folks here can quickly tell you if your calculations are flawed, if you need such reassurance, that is. :-)

73,
Ed Hare, W1RFI

2490. Impedance Matching 70cm

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Michael Haseler <news@8SPAMhaseler.net>
Message-ID: <HPGx5.7668$ap5.133276@news6-win.server.ntlworld.com>
Source record: 180388

I've looked at various YAGI designs for 70cm work. I downloaded and ran "YAGI41" and have been able to modify designs for other frequencies. However I'm getting stuck on the impedance matching systems:
Delta, T and folded.

1) is the spacing distance on delta etc. the centre to centre distance of the edge to edge distance
2) the capacitance giving when matching, is this in series or parallel to the coax.
3) So should I try to minimise or maximise the capacitance?
4) On the folded dipole option, I assume that the capacitance will show 0 where an inductance is needed.

If anyone can help or has any links to information on suitable YAGIs I would be grateful!

2491. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919060221.12575.00000130@ng-ff1.aol.com>
Source record: 180389

>From: Gary Coffman

>Broadcast installations on urban roof tops can have compliance problems.

<snippage>

Yes, they can, Gary, but your post illustrates very well that those problems are dealt with effectively in the commercial world. The original premise of this modified thread was that the broadcasters were being allowed to get away with exposure faux pas while hams were being required to comply. In reality, most commercial stations don't have any problems at all, and those that do, generally deal with them.

73,
Ed Hare, W1RFI

2492. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919061727.12575.00000131@ng-ff1.aol.com>
Source record: 180390

>From: fractenna@aol.com (Fractenna)

>STILL looking for honest answers on how much others get out of the
>Sb220 on 10M...

You may want to post that question on .misc or on one or more of the contesting or DX reflectors. My '220 has been out-of-service for a while.

The SB-221, a '220 that had no stock 10 M operation, was Product Reviewed in March, 1980. The unit ARRL reviewed had been modified for 10 meters. In the lab tests on 10 m, ARRL found the following:

Mode DC input (PEP) PEP RF Output
CW 1000 W 500
SSB 1900 1000

The CW input was limited to 1000 W to stay within the spec of 1000 W max DC input.

The complete review is available for download on the ARRL members-only site.

73,
Ed Hare, W1RFI

2493. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000919062804.12575.00000133@ng-ff1.aol.com>
Source record: 180391

>From: "VE9SRB" srbest@worldnet.att.net

>I should not have made this statement on this NG and regret doing so.

My opinion of you, sir, has just been elevated by about 10 dB.

73,
Ed Hare, W1RFI

2494. Re: Where to get or how to make Capacitance top hat for a screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <39C742AB.668053B9@cmcorp.com>
Source record: 180392

Benjamin Blavat wrote:

> Hi,
> The title is my question? Please email any ideas. I am trying to do this
> cheaply. Thanks,
>
> --
> 73's from W4BEN,
> Benjamin Blavat

Try metal cans like Cookie tin lids, popcorn can lids, Large veggie cans.

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2495. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c74ed1.12103804@news.akorn.net>
Source record: 180393

On Mon, 18 Sep 2000 23:14:14 -0500, CAM <cam2338@bigfoot.com> wrote:

>Seems worst case for conducted common-mode currents might be a full-wave
>dipole fed with 1/2WL of coax measured along the outside braid and using
>no choke. The differential current on the inside of the braid has the
>choice of becoming common-mode current into a high impedance antenna or
>onto a low impedance path to ground down the outside braid of the coax.
>--
>73, Cecil, W6RCA http://www.mindspring.com/~w6rca

The common-mode impedance of the outside of the cable is generaly
limited by all the "stuff" it couples to. You can be pretty sure the
electrical length isn't anywhere near what you expect in most
practical installations.

73 Tom

2496. Re: Mobile antenna help needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <hplx5.198643$c5.4357755@news2.rdc1.on.home.com>
Source record: 180394

<wstevenson@acsd.k12.sc.us> wrote in message
news:39c6ce4f.1131973@east.usenetserver.com...
> I want to install a 2/440 rig in my jeep. The problem is the type and
> location of the antenna. The jeep has round bumbers, so a bumper
> mount is out. I would like to use a "through the glass" antenna, but
> have been told they do not work will with tinted windows. I would
> appreciate any suggestions you may have. How the antenna looks on the
> vehicle is something I have to consider, since my wife drives the
> vehicle some.
>
> Thanks for your help!
>
> Wayne N4AHS

Try mounting it on the front fender using a mount that goes inbetween the
hood and fender. Feed the coax thru the firewall.
Larson has a dual band that works well or there are small dual band rubber
antennas around. I have a Comet SBB-2NMO 19" Dual Band that works well and
is very durable and can handle up to 60 watts. The longer antennas are
going to give you better performance. But if you live in a area with lots
of repeaters you can get away with the rubber Comet.

Barry D.

2497. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q7kf2$m4g$1@plutonium.btinternet.com>
Source record: 180395

Kline,

Better performance than either of the loaded versions will
be obtained on all bands, 80 to 10, with a simple dipole of
random length (eg., your available 70 feet), fed with an
open wire (1 inch or greater spacing) line or 450-ohm ladder
line, also of random length. Simplicity = Efficiency and
easy maintenance.

Suggest you invest in feedline and tuner rather than in
suspended fixed-value loading coils. Or wind your own
low-loss 'loading' coils and locate them in a home-made
tuner in the shack where the weather can't get at them.

Connect the feedline wires together and use the system as a
T-antenna on 160 m tuned against ground. The ground being
the domestic plumbing system plus a few random-length
shallow-buried wires in the garden if you have one.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Kline Wilson <tennis@olypen.com> wrote in message
news:sLBx5.31254$XT1.512214@news5.giganews.com...
> Hi,
>
> I am considering putting up a short loaded dipole,
primarly for 80m. It
> would be about 70 ft long (the max distance I can get
across my house) and
> only a few feet above my roof. It will be in a shallow
inverted V
> configuration, but not symetrical. One version would use
one set of coils.
> The other would use 2 sets of coils and would provide
operation on 40 and 15
> as well as 80m.
>
> Would there be much difference in performance on 80m
between the two
> systems?
>
> Should I use a balun? I will have about 125 feet of coax

running along the
> roof and into the house.
>
> Thanks for the advice...
>
> 73s Kline w7cnn@arrl.net
>
>
>
>
>

2498. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919081308.06614.00000259@ng-cc1.aol.com>
Source record: 180396

>>From: fractenna@aol.com (Fractenna)
>
>>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
>>my Sb220 and 10M FQY is flawed.
>
>I may have missed it, Chip; did you post the methods you used to calculate
>the
>EIRP in the first place? I am especially curious about the gain of the
>antenna
>and by what generally accepted method it was derived (NEC model, calibrated
>antenna range, etc.) I think from there, the competent folks here can
>quickly
>tell you if your calculations are flawed, if you need such reassurance, that
>is. :-)
>
>73,
>Ed Hare, W1RFI
>

Nope; I don't need any pats on the head OR back; but go take a look at the elevation power pattern comparison to a dipole (Fig 3) .

http://www.fractenna.com/ham/hampage1.html

I am a bit amused that HAMS assume I am the village idiot. Some anyway.

EIRP= power to antenna times peak field strength (call it directivity if you wish, some herehave been using the term wrong abd calling GAIN the same as DIRECTIVITY).

If you wish to see how the EIRP figures into galactic SETI and the best way to establish a link, , then I will send you a preprint in a few weeks to W1RFI, if requested.

The paper was given at a conference at Boston University and described at:

http://www.spaceviews.com/2000/09/article3b.html

The paper is by Cohen and Hohlfeld and is:

"Mutual Figure of Merit In an Interstellar Intelligent Communications Link"

The important results from said paper is that : 1) the link will be at microwave; 2) small dishes on receive (such as done by Seti League folks) are a waste of time;
3) the transmitter aperture, if doubling as a power collector (i.e. an aperture engine) has a 4th power of the diameter dependence in the MFOM.

Basically this shows that ad hoc descriptions of using the microwave window, andthe ad hoc assumption of using large dishes are formally and globally correct--without any biases on modality; solid angle covered; or wavelength to be used.

Isn't EIRP wonderful?

Sure hope someone can show I am using it right:-)!

Chip N1IR

2499. Re: N1IR OPEN HOUSE and PW signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919081644.06614.00000260@ng-cc1.aol.com>
Source record: 180397

>dB's are purely relative, and when I'm 20+ dB louder, what else
>can one deduce? I'm running 1.2 to 1.5 KW out into an array with
>about 16.5 dBd gain (including ground reflection) . The stacked
>array is fed with 1" hardline, and designed with careful attention to
>detail concerning any losses. So, why are you so weak???
>Let's see, that is about 45 KW ERP with line losses. Not too shabby,
>but certainly not 20 dB better, may 6 at most.
>
>Compliance to the latest exposure limits is exceeded by over
>a factor of 4 for distance for the worst case, 10M.

So If I WERE running a KW ((which I can't but you claim I can), then you would be about 8 dB stronger.

Gee; if one of my STUDENTS was off by 12 dB they'd get some red ink and a friendly office meeting!

73
Chip N1IR

2500. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000919081810.06614.00000261@ng-cc1.aol.com>
Source record: 180398

>Pot, kettle, black...
>
>73,
>Ed Hare, W1RFI

Door. close. bridge. burn.Liason. History.

73
Chip N1IR

2501. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000919082439.08276.00001934@ng-mf1.aol.com>
Source record: 180399

Hi Kline--

>It would be about 70 ft long...only a few feet above my roof...a shallow inverted V....not symetrical.<

Don't know height of house, but can you pick up any more wire length by drooping the ends (say 10 or 15 feet per side)? That will help your bandwidth.

<...use one set of coils...(vs)...2 sets of coils and would provide operation on 40 and 15<

Wouldn't a pair of 40-meter L/C traps allow you to work both 40 and 15 while inserting minimum inductance in each leg? Also, may be able to use 40-M coils with capacitive pigtail to optimize 15? (think I saw that in one of the antenna books).

> Should I use a balun?<

Always--and especially in your situation.

Rick K1BQT

2502. Re: NEC4 Model (Apology)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C75C1D.9C2F2323@bigfoot.com>
Source record: 180400

W1RFI wrote:
>
> >From: "VE9SRB" srbest@worldnet.att.net
> >I should not have made this statement on this NG and regret doing so.
>
> My opinion of you, sir, has just been elevated by about 10 dB.

In that case, I should have never made any nasty statements whatsoever
in my entire life. :-)
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2503. Re: NEC4 Model of Helically Wound Loop Re: MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <kdJx5.757$ez6.62889@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180401

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39c6858c.41841987@news.akorn.net...
>
>

Hi Tom:

Thank you for the good (as usual) comments. I have addressed some of yours
below.

> >In my opinion, comparing the performance of the MI2 loop and another
design
> >in the ideal state (directivity and impedance) is valid because, for the
> >most part, the practical limitations on the performance of each design is
> >the same. The MI2 Loop and the Random Loop design both have the exact
same
> >wire length, wire diameter and aperture size. Radiation efficiency is
> >simply a function of the ohmic losses in the wire and the radiation
> >resistance. If both antennas have a similar feedpoint impedance,
concerns
> >regarding how the ohmic losses in the wire impact field strength
> >(efficiency) are irrelevant.
>
> Not in all cases. It depends on how the losses are distributed in the
> systems. Different antennas with similar feedpoint resistances and
> conductors can have greatly different losses.
>

I assume that when you state "similar feedpoint resistances" you are
referring to the total resistance which is comprised of both the radiation
resistance and the loss resistance. In general, your statement is
absolutely correct. In the case that I am describing, both antennas have
similar radiation resistance and similar loss resistance. As a result of
this specific condition, the concerns regarding a comparison of efficiency
are not an issue.

>
> >>>> Dr. Cohen:
> >Given that it is in a MUCH smaller--and very electrically small-- form
> >factor
> >(5 inches for 20M wavelength) , I hope you will appreciate that it
cannot
> >radiate well, and that if you got a directivity of order 2 dBi, and an
> >impedance of 30 ohms, that neither of these can help you in getting the
> >observables of field strength and radiation resistance.
>

> I'm puzzled by the 5 inch + 1/8 wl at twenty meters statement. What is
> he saying??????
>

I am not sure either. These statements do not describe the geometry of the design discussed in the $1000 Fractal Challenge thread. My description was not very good either so I can see how he became confused. The alternate design (this thread) is described in a bit more detail. The NEC file is also available for anyone interested.

> >>>>>
> >
> >First, if we model an antenna in NEC4 with zero wire loss, then the
> >calculated feedpoint resistance is the antenna's radiation resistance
(RR).
> >Determining the loss resistance (RL) is simply a function of the ohmic
> >losses in the wire. If we know the radiation resistance and the loss
> >resistance, efficiency is easily determined from RR/(RR+RL). If two
> >antennas have the exact same ohmic loss and similar radiation resistance,
> >this discussion is irrelevant.
>
> Those losses have to be normalized to the point where radiation
> resistance is taken, otherwise they are meaningless. The formula
> Rr/(Rr+Rloss) only works when the resistances are normalized to the
> same point in the system by whatever "transmission line" effects are
> involved in the antenna. If the antenna had uniform current
> distribution, then that formula would work without normalizing the
> resistance loss to the point where radiation resistance was taken.
>

I have been assuming that the loss resistance and radiation resistance are both known quanities at the defined feedpoint.

>
>
> >conditions: 1) When the wire length is much smaller than the wavelength
the
> >radiation resistance will be low and the loss resistance will be a
> >significant factor.
>
> I think what you mean there is spatial area is small compared to the
> wavelength. Ten feet of wire in a one foot area does not have the
> radiating efficiency of ten feet of wire occuplying ten feet of
> spatial area.
>

This is correct. The efficiency of the antenna is a function of both ohmic losses and the radiation resistance. Changing the antenna geometry will impact the radiation resistance and hence efficiency. Other factors to consider are the antenna's directivity and ultimately, the antenna's SWR mismatch loss.

I am not really sure why Dr. Cohen is so focused on efficiency and "field strength is the salient observable". There is a lot more involved in determining the field strength than knowing the antenna efficiency. Two antennas can have the exact same efficiency and entirely different gains and radiated field strength. Two antennas can have the exact same gains and different efficiencies. An antenna with a gain of 20 dBi can be less efficient than an antenna with a gain of 2 dBi. Reflector antennas (dishes) are a good example.

Some general "Antenna 101" comments: Antennas are not power amplifiers. Antennas cannot radiate more total power than that which is delivered to their input terminals. Antennas are directional amplifiers focusing energy in one direction more so than others. The directivity of an antenna is an expression of how much the antenna focuses energy in one direction wrt an isotropic radiator. The efficiency of an antenna is measure of the power losses in the antenna. Gain is determined from both the antenna's directivity and its efficiency.

The efficiency of an antenna is a function of the antenna's radiation resistance (how much power is delivered to the antenna for radiation) and the antenna's loss resistance (how much power is delivered to the antenna and is lost as "heat"). Typically, when an antenna is electrically small, its radiation resistance is very low and its loss resistance makes up a significant portion of the total feedpoint resistance, hence efficiency is low.

Determining the field strength as the "salient observable" requires additional information as this is really a system issue. If you know ONLY the gain of an antenna you cannot determine radiated field strength in V/m. To determine the field strength, we need to know how much power is delivered to the antenna. To determine this, we need to know the antenna's SWR mismatch loss wrt the feed cable and we need to know the losses in any antenna matching network. These are significant factors because an antenna may have high efficiency but it may also have high SWR mismatch losses and as a result, the radiated power (hence field strength) is low.

The point is that this is a more complex issue than knowing antenna efficiency.

>
> >A new helically wound design has been modeled in NEC4 under the following
> >conditions - that it have the same wire length as the previously modeled
MI2
> >Loop, the same wire diameter and the same aperture size. The helically
> >wound antenna consists of a total of 64 turns (16 turns on each perimeter
> >side) formed into a square loop having the same outside perimeter as the
MI2
> >loop. The helical winding diameter is 5 inches. The pitch length per
turn
> >is about 4.95 inches on two sides of the perimeter and about 6.9 inches
on
> >the other two sides.
>

> I would expect that to work more or less about the same as an antenna
> with sharp zig-zags, or better. Sharp bends have no special magic over
> gradual curves.
>
> >Results are as follows:
> >
> > MI2
> >Helical
> >
> >Total Wire Length: 27.56 m 27.96 m
> >Number of Segments in Model: 500 548
> >
> >1st Resonant Frequency (MHz) 15.749 17.657
> >
> >Resonant Resistance (ohms) 28.4 47.9
> >
> >Directivity (dBi) 2.14
> >2.31
> >
> >2:1 SWR bandwidth on 50 ohms: 1.27% 2.83%
> >
> >
> >3rd Resonant Frequency (MHz): 28.65 33.35
> >
> >Resonant Resistance (ohms): 19 39.2
> >
> >Directivity (dBi): 4
> >3.91
>
> What happens when you add wire losses?
>
> 73 Tom

I will let you know when I include them in the model.

73, Steve

2504. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C75E1E.D0C31182@bigfoot.com>
Source record: 180402

Tom W8JI wrote:
> The common-mode impedance of the outside of the cable is generaly
> limited by all the "stuff" it couples to. You can be pretty sure the
> electrical length isn't anywhere near what you expect in most
> practical installations.

What's the feedpoint impedance of a half-wave folded monopole?
If the physical length including VF is 1/2WL and grounded at one
end, it is hard to visualize how the impedance at the other end
could possibly be any lower.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2505. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000919090637.08276.00001941@ng-mf1.aol.com>
Source record: 180403

The FQY's on-the-horizon orientation, the area's irregular ground characteristics, the radiator's unusually low mounting height, plus the extremely uneven terrain and presence of large obstructions at Ledgewood Place are all givens--observed by any who attended the N1IR open house.

Is it your position that, under these most unusual site conditions, your far-field ERP is easily calculated and constant for all headings--something like a microwave dish pointed straight up into deep space?

Rick K1BQT

2506. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C76334.A560B46@bigfoot.com>
Source record: 180404

Reg Edwards wrote:
> Better performance than either of the loaded versions will
> be obtained on all bands, 80 to 10, with a simple dipole of
> random length (eg., your available 70 feet), fed with an
> open wire (1 inch or greater spacing) line or 450-ohm ladder
> line, also of random length. Simplicity = Efficiency and
> easy maintenance.

I dunno, Reg. EZNEC sez the SWR will be almost 200:1 on 80m.
He could wind up trying to match two ohms or 90k ohms. IMO, the
G5RV length of 102ft is just about the minimum acceptable dipole
length on 80m. Walter Maxwell suggests that 3/8WL minimum is a
good rule of thumb.

He could have a 70ft horizontal section and have 16ft hanging
down vertically on each end. But if the dipole has to be 70
ft long, I think loading coils would work better for 80m
operation.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2507. Re: WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: kd5izi@my-deja.com
Message-ID: <8q7pjpeve1@nnrp1.deja.com>
Source record: 180405
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <8q5gspqav1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> My ground floor apartment is VERY RF-unfriendly. Even with my trusty
> ADI/Premier RD-98 antenna (a long, flexible 2m/70cm antenna for HTs),
<SNIP>

I have a J-pole home-brewed from TV twin-lead that works amazingly well. I use it when I'm travelling. During my last trip I was able to hit a repeater nearly 10 miles away with my HT on it's low power (1W) setting. This was from inside a hotel room with the antenna hanging from the bedpost. I like it because it's very handy for travelling and provides significant gain over a rubber duck.

Sent via Deja.com http://www.deja.com/
Before you buy.

2508. SGC-230 and ladderline?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <CGJx5.7169$nk3.344628@newsread03.prod.itd.earthlink.net>
Source record: 180406

I was just going through the manual for my new SGC-230 tuner (replaced a 230 PRO) and noted that on page 25 of the manual they show using the 230 feeding a center fed antenna through a balanced feedline. Elsewhere in the manual, they make the point that you must not connect a feedline (assume they must mean a coax feedline) to the output of the tuner. Have any 230 owners fed balanced antennas via a balanced feedline? What's the effect of using a balanced feedline in this fashion, where one side is effectively grounded?

K8AC
Floyd Sense - Angier, NC

2509. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q7p9c$bh8$1@uranium.btinternet.com>
Source record: 180407

I forgot to add - if possible turn the ends of the dipole sideways or downwards through 90 degrees to increase overall wire length. This modification is a very effective way of improving multi-band performance in a limited space.

Another disadvantage of loading coils and traps - their weight very much increases wire sag and decreases effective antenna height. Of all antenna characteristics on the lower HF bands, height above ground is the most important parameter.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:8q7kf2$m4g$1@plutonium.btinternet.com...
> Kline,
>
> Better performance than either of the loaded versions will
> be obtained on all bands, 80 to 10, with a simple dipole
of
> random length (eg., your available 70 feet), fed with an
> open wire (1 inch or greater spacing) line or 450-ohm
ladder
> line, also of random length. Simplicity = Efficiency and
> easy maintenance.
>
> Suggest you invest in feedline and tuner rather than in
> suspended fixed-value loading coils. Or wind your own
> low-loss 'loading' coils and locate them in a home-made
> tuner in the shack where the weather can't get at them.
>
> Connect the feedline wires together and use the system as
a
> T-antenna on 160 m tuned against ground. The ground being
> the domestic plumbing system plus a few random-length
> shallow-buried wires in the garden if you have one.
> --
> ---
> Regards from Reg, G4FGQ
> For free radio design software go to:
> http://www.btinternet.com/~g4fgq.regp

> ----------
> Kline Wilson <tennis@olypen.com> wrote in message
> news:sLBx5.31254$XT1.512214@news5.giganews.com...
> > Hi,
> >
> > I am considering putting up a short loaded dipole,
> primarly for 80m. It
> > would be about 70 ft long (the max distance I can get
> across my house) and
> > only a few feet above my roof. It will be in a shallow
> inverted V
> > configuration, but not symetrical. One version would
use
> one set of coils.
> > The other would use 2 sets of coils and would provide
> operation on 40 and 15
> > as well as 80m.
> >
> > Would there be much difference in performance on 80m
> between the two
> > systems?
> >
> > Should I use a balun? I will have about 125 feet of
coax
> running along the
> > roof and into the house.
> >
> > Thanks for the advice...
> >
> > 73s Kline w7cnn@arrl.net
> >
> >
> >
> >
> >
>
>

2510. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <3118-39C769E8-14@storefull-117.iap.bryant.webtv.net>
Source record: 180408

Tom, W8JI wrote:
"Relying on one source, especially a Military publication from many years ago (and especially when dozens of other sources conflict with that data), can get you in trouble."

It is important to consider the source. None are infallible. But, I recall reading of the WW-2 efforts to produce the military book in a civilian book published about 50 years ago. Authors of the civilian book were Timbie and Bush, if I recall correctly.

The military book, "Electrical Communications Systems Engineering", does not include any puffery for promotion. It was issued, not sold.

The forward is simple: War Department, Washington 25, D.C., 25 April 1945.

TM 11-486, Electrical Communications Engineering, is published for the information and guidance of all concerned. By order of the Secretary of War: G.C. Marshall, Chief of Staff.

Relying on TESTIMONIALS can get you in trouble. The authors of the War Department book were America`s leading scientists. Contents were backed by tests, measurements, and experience. The purpose was survival in the most perilous times. Further the purpose was "---for the use of staff signal officers---."

This War Department book is old, but the laws of nature have not changed any more than Ohm`s law has changed.

Best regards, Richard Harrison, KB5WZI

2511. Re: SGC-230 and ladderline?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39C76DA0.3B448316@bigfoot.com>
Source record: 180409

Floyd Sense wrote:
>
> I was just going through the manual for my new SGC-230 tuner (replaced a 230
> PRO) and noted that on page 25 of the manual they show using the 230 feeding
> a center fed antenna through a balanced feedline. Elsewhere in the manual,
> they make the point that you must not connect a feedline (assume they must
> mean a coax feedline) to the output of the tuner. Have any 230 owners fed
> balanced antennas via a balanced feedline? What's the effect of using a
> balanced feedline in this fashion, where one side is effectively grounded?

The reason that SGC doesn't want one to connect a feedline to the output terminals of the SGC-230 is that the voltage *can be* sky high. It doesn't have to be sky high but it can be. For instance, using a 14ft mobile whip on 75m, the whip base voltage will be enough to cause coax to arc over if used on the output. That's why the SGC-230 doesn't have a coax connector on its output. This sky high voltage condition *usually* doesn't exist when using balanced feedline. So the apparent contradiction is context dependent and can be summed up as:

Avoid using a transmission line on the output of the SGC-230 anytime the resulting output voltage would cause the transmission line to arc and/or melt.

When using balanced feedline on the average fixed ham antenna, the output voltage from the SGC-230 is no higher than from an ordinary tuner. Therefore, the same matching techniques can be used, which includes a balun/choke on the output of the SGC-230. However, caution must be taken to ensure that the balun doesn't see the maximum voltage of which the SGC-230 is capable.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2512. Re: WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Y2=HOeFwY16QUznCE5DYyzfm5Ic4@4ax.com>
Source record: 180410

jason_hsu@my-deja.com wrote:

>
>Should I select a 6m/2m/70cm antenna? In a few years, I might buy an
>HT that gets 6m or an HF rig that gets 6m/2m/70cm (like the Icom
>706MKIIG or Yaesu FT 847).

Why don't you just build a little ground plane vertical on a coax receptacle? Do one for 2. Another for 440. Just get out your trusty soldering iron, some wire, and build the little suckers. Hang 'em in various parts of your apartment, and see what happens. And if that doesn't work, then look at some kind of "gain" antenna.

Bob
k5qwg

2513. Re: Mobile antenna help needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39C76FBB.3C2F2142@3n.net>
Source record: 180411

wstevenson@acsd.k12.sc.us wrote:
>
> I want to install a 2/440 rig in my jeep. ... How the antenna looks on the
> vehicle is something I have to consider....

Heck, Wayne, mount the biggest/best antenna you can afford just like our
Uncle Sam did on his Jeeps. After all Jeep styling is ... well hardly
"PC" so go with the flow.
73 de KA3DWW

2514. Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: yu131537@yorku.ca
Message-ID: <8q7qrv$9m2$4@sunburst.ccs.yorku.ca>
Source record: 180412

Hello Everyone

May I please ask for your help. I am sorry to be a little off topic, but the other newsgroups devoted to radio seem to be a lot less popular then this group.

Could you please tell me the names of shock jocks like Howard Stern, Don Imus, Mancow Muller? It would also help if I knew the names of the radio stations they work for. Would you know of websites/newsgroups where I could find this info?

Thanks a lot, I would truly appreciate your help!!

Stan

2515. indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Stan Olson <solso@advancenet.net>
Message-ID: <39c77b43@news.advancenet.net>
Source record: 180413

I live in the first floor of a dorm and I was wondering if there was any sort of antenna I could build or buy to improve reception / transmit on 2m/440... Outside antennas are not an option, so it has to be completely indoors. I've got an Icom W32A with a Comet BNC24 whip antenna on it right now. It works fairly well, but I was curious if there was anything else better to try other than walking outside and trying there, hehe. Would a mag mount dual band antenna work indoors? (would I be harmed by the RF?) If anyone has any ideas, please let me know. I bought the 'Stealth Antennas' book by ARRL, but it was disappointing with it's lack of indoor options. Thanks!

Stan Olson
solso@advancenet.net

2516. Re: multiband HF antenna comparisons

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39C77D6B.10C77F44@wb6hqk.ampr.org>
Source record: 180414

Hi Ed,

W1RFI wrote:
>
> >From: "Reg Edwards"
>
> >The Windom is no better nor worse than most other sorts of
> >simple wire antenna in that it radiates nearly all the power
> >which is put into it - even on 15m. You've been listening
> >to the wrong old-wives' tales.
>
> I respectfully disagree. The Windom functions as a loaded random wire, worked
> against earth ground. The single-wire "feed line" is actually the part of the
> antenna that does the majority of the radiation. The "feed line" generally
> will not radiate as efficiently as would an antenna at the same height as the
> top section, due to losses in buildings, etc.

At it's primary design frequency, the classic Windom operates as a
horizontal half wave dipole. The single wire vertical feedline operates
substantially without standing waves and is responsible for around ten
percent of the total radiation. The operating impedance of the feedline
is in the neighborhood of 600 - 900 ohms making the ground losses
associated with the feedline generally small compared to the the losses
associated with the 1/4 wl high horizontal dipole radiator. The Windom
is a mechanically robust, elegant design suitable one or two band
operation, but probably not a good choice in a cluttered environment
where the common mode feedline current is likely to pick up stray RFI.

> The Z at the end of that "feed line" is difficult to predict. This can
> generally be matched with a good antenna tuner, though.

When the system is properly adjusted, the feedline operates
substantially free of standing waves and the impedance at the
transmitter end of the feeder will be between 500 and 1200 ohms,
primarily dependent on wire size. Significant deviation is a sure sign
the antenna is not properly adjusted.

The primary downside of the classic Windom is that it is a narrowband
antenna with a high impedance feed. If not adjusted properly, or
operated more than a few percent off it's design frequency, the vertical
feeder does indeed become a significant part of the radiating system.

bart
wb6hqk

2517. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C77D86.ABDBCC0F@oio.net>
Source record: 180415

Stan Olson wrote:
>
> I live in the first floor of a dorm and I was wondering if there was any
> sort of antenna I could build or buy to improve reception / transmit on
> 2m/440... Outside antennas are not an option, so it has to be completely
> indoors. I've got an Icom W32A with a Comet BNC24 whip antenna on it right
> now. It works fairly well, but I was curious if there was anything else
> better to try other than walking outside and trying there, hehe. Would a mag
> mount dual band antenna work indoors? (would I be harmed by the RF?) If
> anyone has any ideas, please let me know. I bought the 'Stealth Antennas'
> book by ARRL, but it was disappointing with it's lack of indoor options.
> Thanks!
>
> Stan Olson
> solso@advancenet.net

Stan,
run down to Radio Shack, get a roll of the tape used on
windows for alarms systems and two connectors. 'Tape' up
some 1/4 wave antennas on the window(s). (better than
nothing.)
'Doc

2518. Re: Shock Jock Freak list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000919110237.19202.00000148@ng-fe1.aol.com>
Source record: 180416

>
>Could you please tell me the names of shock jocks like Howard Stern,
>Don Imus, Mancow Muller? It would also help if I knew the names of
>the radio stations they work for. Would you know of
>websites/newsgroups where I could find this info?
>
>Thanks a lot, I would truly appreciate your help!!
>
>Stan
>
>

If I didn't join the self help group I would post the following:

On this NG we have:
Chip, NC, Dr. Nathan Cohen pH.D., Freak, Frac, Phil, JoeO, Cohendog, Fractenna, etc.
They can be heard at radiostation N1IR using freak-frac antennas. Often they have runs, which they post here to annoy people. Their antenna claims are shocking, like fecal flyer antenna, Quad is a Yagi, Russians use repeaters to jam broadcasts, 10 dB is 20 dB, $1000 challenge, chimp is top antenna designer, closed Open house, talking to themselves, etc. They report getting death threats and are promising to sue everybody. They sure make Howard Stern look look like kindergarden jock.
I am sure this will help.
With best wishes

Bada BUm
Sorry group, it will never happen again (till next time :-)

2519. Re: Better hide your antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <e30fss4lgpv7pfc44afijk9ke1tdbt5gim@4ax.com>
Source record: 180417

On 19 Sep 2000 10:02:21 GMT, w1rfi@aol.com (W1RFI) wrote:
>>From: Gary Coffman
>
>>Broadcast installations on urban roof tops can have compliance problems.
>
><snippage>
>
>Yes, they can, Gary, but your post illustrates very well that those problems
>are dealt with effectively in the commercial world. The original premise of
>this modified thread was that the broadcasters were being allowed to get away
>with exposure faux pas while hams were being required to comply. In reality,
>most commercial stations don't have any problems at all, and those that do,
>generally deal with them.

We have to, Ed. They still inspect broadcast stations. Not as often as they
used to, but just as strictly. There are big fines, and the possibility of loss
of license, if we aren't found to be in compliance. RF exposure regulations
are old hat for us now. The latest big deal has been tower painting and lighting.
They've been laying some really heavy fines for not having that right.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2520. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8q7vdl$a4g$1@iac5.navix.net>
Source record: 180418

Oh no, the dreaded indoor mag mount antenna. Death would come in a flash along with excruciating pain from the handy talkie RF field. Your only hope is to order the "Internal antenna and shield" from the local infomercial for $19.95 plus shipping and handling. (smartass mode off)

All transmitters below 50 watts on 2 meters do not even require a compliance statement. The "problem" has been so over hyped, one can put it in the same class as little green men from mars. That being said, we are required to meet the RF specs. To answer your original question, an indoor 1/4 wave antenna on a mag mount sitting on a pizza pan should work for you. If not, check into one of the stealth antenna such as the venttenna.

--

Fred W4JLE
http://w4jle.com/

"Stan Olson" <solso@advancenet.net> wrote in message
news:39c77b43@news.advancenet.net...
> I live in the first floor of a dorm and I was wondering if there was any
> sort of antenna I could build or buy to improve reception / transmit on
> 2m/440... Outside antennas are not an option, so it has to be completely
> indoors. I've got an Icom W32A with a Comet BNC24 whip antenna on it right
> now. It works fairly well, but I was curious if there was anything else
> better to try other than walking outside and trying there, hehe. Would a
mag
> mount dual band antenna work indoors? (would I be harmed by the RF?) If
> anyone has any ideas, please let me know. I bought the 'Stealth Antennas'
> book by ARRL, but it was disappointing with it's lack of indoor options.
> Thanks!
>
> Stan Olson
> solso@advancenet.net
>
>
>

2521. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:07:02 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <G6yx5.107$0d.10087@monger.newsread.com>
Source record: 180380

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"CAM" <cam2338@bigfoot.com> wrote in message
news:39C6356B.121F52AB@bigfoot.com...
> Brian Kelly wrote:

<snip>

. It's probably fairly uncommon for baluns to experience
> appreciable heat losses.

I've shattered the core in a couple, but that was trying to run on the
second harmonic.

> The losses are generally of the nature of
> RF that doesn't make it to the antenna because of current imbalance.
> Some people don't consider unwanted feedline radiation as losses. I do.

I conisder it not only a loss, but one with the potential (no pun intended)
of becomming a real nuisance.

Roger (K8RI)
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2522. Re: WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:18:36 UTC
From: w1rfi@aol.com
Message-ID: <20000918201836.18817.00000428@ng-fl1.aol.com>
Source record: 180376

>From: Ralph Mowery

>If the antenna has to be inside you might want to try a homemade ground
>plane hanging from the cealing.

See:

http://www.arrl.org/tis/info/pdf/9107033.pdf

73,
Ed Hare, W1RFI

2523. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:23:59 UTC
From: w1rfi@aol.com
Message-ID: <20000918202359.18817.00000429@ng-fl1.aol.com>
Source record: 180377

>From: 2w8ji@contesting.com (Tom W8JI)

>Just remember if you have a problem, it can be next to impossible to
>get it resolved.

The FCC generally supports requiring the power company to correct problems with residential distribution lines. On HV lines, however, they generally do not. An FCC decision made in the 1970s that "corona discharge" from HV lines is a "natural phenomenon" still stands.

If the line is clean now, but develops noise in the future, you may be able to make a case. OTOH, I have seen the FCC take a position that requiring a utility to rebuild miles of HV line to protect a few hams and rural TV reception was "not in the public interest."

I agree with Tom; you may not want to take a chance, if you have housing options.

73,
Ed Hare, W1RFI

2524. Re: Rectification in Alarm System speakers from Beam Antenna--help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 00:36:15 UTC
From: w1rfi@aol.com
Message-ID: <20000918203615.18817.00000432@ng-fl1.aol.com>
Source record: 180378

>From: jeffreys@cyburban.com (Jeffrey Steinberg)

>I installed a whole mess of RF chokes on all of the leads coming into the
>alarm system computer in his basement. I did the same thing at the first
>floor speaker, but the rectification is still there and quite loud.

You may also need to filter the AC line feeding the alarm, both with RF chokes and possibly an AC line filter (Industrial Communications Engineers - see http://www.arrl.org/tis/tisfind.html or Radio Shack catalog #15-1111).

How did you make your RF chokes? One common "mistake" is to try a single clamp-on ferrite for HF; generally, an RF choke requires more inductance. Try a Palomar F-140-43 ferrite core, if the wires are small enough to get about 10 turns of wire onto it; otherwise, use an F-240-43 size core. The 43 materoal is about optimum for the upper HF range.

Sometimes you may need a similar filter on remote sensors, if they use active electronics. Also, the wiring may not be balanced well at RF, so caps across the line may be needed, *but check with the alarm manufacturer about doing this*. Some sensors may not work if they see too much capacitance.

If the speaker is located remotely from the control unit, it may be best to concentrate there. Is it an amplified speaker, or passive? An F-140-43 core, 10 turns, at the point where the speaker wire enters the control unit may help. You can also try a speaker-lead filter (Industrial Communications Engineers). Be very careful about putting caps across the speaker leads; some audio amps become unstable and overheat when confronted with a highly capactive load.

73,
Ed Hare, W1RFI

73,
Ed Hare, W1RFI

2525. Re: N1IR OPEN HOUSE and PW signal...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 02:04:26 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <KQzx5.7216$tn.100644@typhoon.ne.mediaone.net>
Source record: 180379

Must be a very lossy and poorly designed system on your end.

dB's are purely relative, and when I'm 20+ dB louder, what else
can one deduce? I'm running 1.2 to 1.5 KW out into an array with
about 16.5 dBd gain (including ground reflection) . The stacked
array is fed with 1" hardline, and designed with careful attention to
detail concerning any losses. So, why are you so weak???
Let's see, that is about 45 KW ERP with line losses. Not too shabby,
but certainly not 20 dB better, may 6 at most.

Compliance to the latest exposure limits is exceeded by over
a factor of 4 for distance for the worst case, 10M.

2526. Mobile antenna help needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 02:24:32 UTC
From: wstevenson@acsd.k12.sc.us
Message-ID: <39c6ce4f.1131973@east.usenetserver.com>
Source record: 180375

I want to install a 2/440 rig in my jeep. The problem is the type and location of the antenna. The jeep has round bumbers, so a bumper mount is out. I would like to use a "through the glass" antenna, but have been told they do not work will with tinted windows. I would appreciate any suggestions you may have. How the antenna looks on the vehicle is something I have to consider, since my wife drives the vehicle some.

Thanks for your help!

Wayne N4AHS

2527. Re: WANTED: 2m/70cm antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 02:42:21 UTC
From: jamesrhampton@my-deja.com
Message-ID: <8q6jqa$4pm$1@nnrp1.deja.com>
Source record: 180381
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Jason, I don't know what your apartment building construction is like. If the building has a lot of steel, you may have a problem. I have an old HTX-404 which worked fairly well, but I had problems hitting one favorite repeater when I got perhaps 10 miles away. Not readable on low power, and some 'bacon frying' on high power. I purchased a flexible gain antenna perhaps 16 inches long or so with the BNC connector on it. It made a huge difference. From the location I mentioned which was perhaps 10 miles away (the vet's office), I am now full quieting into the repeater on LOW power. I have no problems 20 miles out with the HT and have used it from inside the car maybe 6 or 8 miles away with no problems (not recommended since the car attenuates the signal probably 10 dB!). At work, however, the building has a lot of steel inside and I really can't use the repeater even though it may be only 5 miles away. Walking 1 or 2 feet can bring it in or drop it out. I have to go outside to use the HT. What I am saying is that buying a gain antenna may indeed work for you - IF it isn't the building that is killing you. Do you know anyone with a gain whip for the HT that you could borrow it for a day (or an hour or so) just to try it and see if that helps?

Best of luck and 73s
Jim AA2QA

In article <8q5gspqav1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> My ground floor apartment is VERY RF-unfriendly. Even with my trusty
> ADI/Premier RD-98 antenna (a long, flexible 2m/70cm antenna for HTs),
I
> need to use the roof of my car parked outside as a ground plane in
> order to transmit into the local repeater (which is a good 15 miles
> away).
>
> Should I buy the $10 telescoping antenna that Radio Shack sells for
> 2m/70cm? It is quite cheap, and it should perform better than the
> flexible antenna when fully extended. A telescoping antenna is
> fragile, but I can still use the flexible antennna away from home.
>
> Would it be possible for me to use a mobile antenna with my HT? (If
> so, I realize I would probably need to buy special adapters as well.)
>
> Are there other options? A dipole? A wire? A small base station
> 2m/70cm antenna?
>
> Should I select a 6m/2m/70cm antenna? In a few years, I might buy an

> HT that gets 6m or an HF rig that gets 6m/2m/70cm (like the Icom
> 706MKIIG or Yaesu FT 847).
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2528. Olden days

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 21:43:25 UTC
From: william ewald <wgewald@att.net>
Message-ID: <ffnfssksgl41q9v4l1i3s2hmo2ue0bjqnd@4ax.com>
Source record: 180346

On Sun, 17 Sep 2000 18:23:37 -0400, "W4JLE" <w4jle@alltel.net> wrote:

>
>I believe you are referring to Edward R. Murrow. Not sure where the W came
>from.

Walter Winchell gave him one of his?

2529. a tutti i possessori di scanner!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 22:56:45 UTC
From: "er chiocciol@" <alibbabb@tiscalinet.it>
Message-ID: <8q8qus$j42$1@pegasus.tiscalinet.it>
Source record: 180347
Cross-posted to: it.hobby.radioamatori,it.hobby.radio-cb,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Sono in possesso di uno scanner portatile da pi&#65533; di un anno e non sono ancora riuscito ad ascoltare la frequenza di lavoro dei radio taxi di Roma, se qualcuno conosce la frequenza me la pu&#65533; dire? Gliene sarei molto grato! Grazie e 73!

2530. Q: best wire using a tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 23:26:27 UTC
From: Korinna & Peter <Peter.Hovorka@t-online.de>
Message-ID: <39C7F623.943CF5CD@t-online.de>
Source record: 180348

Hi everyone,

here I am - living in a house which has just one possible location for a
wire antenna - the attic.

It's about 12m (40ft) long, 2m (6ft) wide.
Equipment is an automatic tuner by kenwood - at250.
One possibility for 'grounding', at 2/3 of total attic length.

My question:

How should I install a wire to get best results on as many as possible
bands.

Many thanks in advance,

Peter

--
Korinna Imle & Peter Hovorka
ICQ #74200239
Peter: DG1GPQ
http://WWW.CYBERCATS.DE
--

2531. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-19 23:53:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8q8u78gab2@neptunium.btinternet.com>
Source record: 180349

Dear Cec,

There's nothing wrong with 16 feet. Or what amounts to the same thing - 80 toes. But your figure is based on an original exact dipole length of 70 feet or 350 toes which is actually a guess, hopefully in the right ball park. Under the circustances Kline can only be recommended, by some means or other, to substantially increase the overall length of his proposed antenna. To advise an increase of precisely 16 feet on each end would be incorrect if he could manage more.

But I do see what you have in mind. Another 16 feet on each end would take the antenna into the G5RV region where a tuner might be dispensed with and the system tuned up by adjusting the length of the ladderline. I hate to be such a pessimist, Cecil, but would not the feeder length be too short to be used in that manner? Especially if the shack is in a bedroom.

There's a blind operator near me who has a low dipole. It is resonant somewhere between 80 and 160m. The dipole centre passes by the shack (his bedroom) window. Feeder length is about 6 feet to the tuner. He has no worries about swr on the feedline which is open wire spaced at 5 inches.

I hear there's a continuing drout in Texas. Is it something to do with global warming ? It can't be doing your ground system much good. On the other hand a point can be reached where the soil has such a high resistivity the ground induced loss under a low dipole falls steadily.
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

CAM <cam2338@bigfoot.com> wrote in message
news:39C7A1CD.7971FAA3@bigfoot.com...
> Reg Edwards wrote:
> > Adding 10, 15 or 20 feet of wire, towards the ground,
from
> > the dipole ends would overcome your objections to high
swr.
>
> Here's what I said: "He could have a 70ft horizontal

section
> and have 16ft hanging down vertically on each end."
>
> Exactly what is wrong with 16 feet? :-)
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2532. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d227e4.74549055@news.seanet.com>
Source record: 179969

On Wed, 20 Sep 2000 03:04:40 GMT, klocko@toad.net wrote:

>In article <0YSx5.705$u95.2248226@news.ntplx.net>,
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>> <klocko@toad.net> wrote:
>>
>> > Actually, EIRP is the power at the antenna times the gain of the
>antenna
>> > referenced to an isotrope. If you prefer dB's, it's dBm + dBi.
>>
>> Just as a few points of clarification, it would be equally valid for
>any
>> other expression of power, such as dBW, etc.
>
>No argument. I wanted to keep it simple.
>
>It is also the power fed
>to the
>> antenna terminals, not the power of the transmitter, unless you also
>factor
>> in feed line loss.
>
>I did say "at the antenna."
>
>> Also, that dBi reference is for the gain of the antenna in situ; ie,
>over
>> ground, with any other attenuations factored (loss through buildings,
>etc.)
>
>If you mean the gain in the presence of the building or ground as
>reflected in the pattern, I agree. Are you saying a loss through a
>building should be factored into the gain or factored out? If it's an
>absorption loss due to material (brick, wood, etc), I think I'd keep
>that a separate term.
>
>> As a last point of reference, over "average" ground, a half-wave
>dipole up a
>> half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
>is a
>> gain of about 5.2 dBd.
>
>Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
>between dBi and dBd values. One other point. Sometimes the ERP (the
>power at the antenna times the gain of the antenna referenced to a

>half-wave dipole) is needed. The value of gain used in the
>calculation might then need to adjusted by that nasty little 2.15 dB
>term.
>
>>So a half-wave dipole over real ground really
>does
>> have a gain of 5.2 dB compared to a half-wave dipole. :-) This is, of
>> course, because the term dBd is a half-wave dipole in free space. This
>> causes no end of confusion when some compare an antenna gain to a
>dipole at
>> the same height and call the result dBd. The terms dBi and dBd really
>are
>> mathemetical constructs.
>
>Well, there's got to be some number that antenna manufacturers can crow
>about in their ads. 73,
>Bill N3WK
>

Hi Ed, Bill (and anticipating next in thread) Chris,

the comment above:
>> Also, that dBi reference is for the gain of the antenna in situ; ie,
>over
>> ground, with any other attenuations factored (loss through buildings,
>etc.)
This may be true in any (or every) instance, but it is not the meaning
and is not the point for using dBi.
It is ammended later with:
>>The terms dBi and dBd really are
>> mathemetical constructs.
which is literally true, but the statement is not very informative.

This goes to the cry to compare like things to like things - after a
fashion.

The power of employing dBi as a method to report gain or field
strength is not in some mathematical artifice. The power is with the
basis of comparison. This goes back to Chris's complaint that he does
not see enough head to head comparisons being made with various
fractal designs being offered. Here the basis is being explicitly set
to force comparison of one fractal yagi(?) antenna against another,
conventional yagi(?) design.

This is not a particularly useful basis however, with this basis being
too constrained to be useful against any other, conventional yagi(?)
design. Now we can all appreciate that we can loosen the constraints
so that if one has a similar conventionally designed antenna, then the
reported comparisons could be inferred with regard to another antenna
"like" the one chosen for comparison to the fractal. We do this every
time we match characteristics between competing ads for antennas in
the magazines.

This reveals, however, that the "likeness" becomes a moving target and some one can once again introduce the demand that their antenna choice be made the basis for comparison against the fractal (or any design for that matter). Such clamor or demand to be basis quickly devolves into chaos or is met with an un-ending, growing list of comparisons.

So, where does this leave us, and what does it have to do with dBi?

The i of the dBi is for an isotropic radiator. A caveat to this is that such a beast is not expected to be realized as an actual antenna. And yes, this is performed through mathematical constructs. However, this last statement is not an argument, it is an observation.

The utility of dBi and specifically with the isotrope is that once a measure is made of a test antenna, it may be compared to any antenna which is similarly expressed in dBi. Thus dBi is the lingua franca, or the basis of comparison.

If you choose (or desire to have) another antenna to compare against, you simply reduce both antenna's to their dBi representations and you can judge both against the isotrope.

This method is common in metrology (calibration) and is called "transfer" and the isotrope becomes the Transfer Standard. Transfer Standards guarantee a basis for accurate measurement by being well known (thoroughly documented) and very stable. The isotrope satisfies these characteristics by being an artificial construct with a very simple criteria: an equal radiation of power in any direction. This of course means that as an efficient radiator, it is an example of the lowest gain antenna. Only an antenna with loss could have lower radiation in all directions.

This in a sense promotes the vertical which is characteristically called a radiator that is equally poor in all directions - the promotion comes by virtue of "all directions" not being technically correct (the arguer is implying a hemisphere instead of the complete sphere for one). Thus the efficient monopole will exhibit positive, equal dBi valuations in every direction normal to the axis (this is equally true with the dipole, but the perspective is distorted with the inclusion of earth).

We then move to consider polarization if we are speaking of point to point communication that is within sight. Both the vertical and horizontal dipoles will exhibit identical emission of power (in free space), but with respect to polarization, their dBi gains will be vastly different. As this agrees with experience (we call it cross polarization) the basis of comparison employing an isotrope proves its utility. Line of sight modeling is not the whole and be-all though, but further discussion will add little.

We then move to consider the environment. This is a consideration that is free of basis unless the issues are forced into the discussion. This is fine, but if such considerations are not amenable to elimination, reduction, or compensation, then they may reduce the

discussion so much as to constrain it for unique circumstances that are rarer than the isotrope. That is, not everyone has the same height tower (do you fudge for inches or feet?), not everyone has the same terrain (should you add a hill or mountain to standardize the fractal to you back yard?), and absolutely no one (except ships at sea) have the same ground.

These last issues either must be eliminated from the discussion, or accounted for AFTER the basis of comparison has been reported. In other words if antenna A exhibits 3dBi at 15 degrees over average ground, then antenna B needs to be measured on the basis of the same average ground, or reported for a different ground with a supplemental report of the effect of other grounds on that reported value. The inclusion of "real" characteristics introduces the problem of too many variables and what is called in software programming "combinatorial explosion." In other words, take all possible combinations of several variables and you may come to the requirement of reporting millions, possible billions of test results.

What price reality? Basically it is wholly unneeded. The point of Transfer Standards is that if there are differences OUTSIDE of the design, that is your problem not the comparison's. Reality is what you have to live with, period. Given two antennas provide identical results in the same "perfect" environment, then there is every likelihood that they will suffer equally in the same "real" environment. Thus if you can eliminate environment from the comparison, you are actually comparing like to like (even if there is a proxy isotrope). This is why I chose to perform my analysis of fractal antennas within the perfection of EZNEC. I couldn't possibly satisfy everyone (or even a majority) by making an arbitrary (or popular) choice of "real" ground constants.

Now having dismissed reality, it must be acknowledged that "real" characteristics may be part of the design, and that they may even be beneficial to the bottom line. The recent design of the k2 is a case in point where ground is very necessary to the design goal of optimizing take-off-angle. Ground becomes part of the antenna. You might liken it to a very lossy passive element, but useful to the single goal none-the-less. You will also note that the cost to this deadly embrace is that the antenna, overall, has no gain figure better than say -5 dBi in any direction, and often much less (which provides for a modest F/B).

The necessity of ground being included in the basis of comparison raises the odds (it toys with the probability of arguments collapsing under the weight of that mentioned combinatorial explosion), and such inclusion becomes problematic. I resolved that with an alternative design, the Flying H, which demonstrates a similar need for ground as passive element. Both designs show extreme variation in their characteristics as their elevation is changed over centimeters, not feet. Ground, for these designs, cannot be escaped nor easily

rendered into comparisons for other users who have grounds that are different (or worse, of unknown characteristic).

Thus the employment of dBi to report these characteristics is satisfying in that it provides a standard basis of comparison. Elaborations in the environment are separable and if you demand comparisons on that basis, you can amend those same reports without disturbing the assumptions made about the antennas (except for that class of ground huggers like the k2).

73's
Richard Clark, KB7QHC

2533. This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C937B2.46AA3863@uci.edu>
Source record: 179970

Fractenna wrote:
> This thread is closed.
>
> NC

There. That's how you close a thread, NC.

xg

2534. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C938F8.D50F9DBF@uci.edu>
Source record: 179971

Fractenna wrote:
> >What was it that Rain Man kept saying over and over again?
> >
>
> This thread is closed.
>
> NC

No. I meant the other Rain Man.

2535. from Elk Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39C93515.8E69CCB6@tpi.net>
Source record: 179972

Jenni,
We (Elk Antennas) make a log periodic antenna designed for the 900 MHz band that might do the job for you. We sell it to people who have difficulty making credit card transactions with their modem.

I am unsure as to how to make the connection to your transmitter, but you could buy an antenna and try several methods to see if one would work for you. The antenna is guaranteed, if you can't make it work within 30 days, just return it an we will send your money back, but this does not include shipping charges.
If you give me your location, I could tell you how much it would cost to ship.

There is a effective radiated power limit imposed to prevent cross transmission to an adjacent cell site, and it is up to you to not exceed that limit, although it sounds like you are in a fringe area and may not exceed it.

I will include a picture of the antenna but with a extreme environment coating
which costs an extra $10, which you probably would not need. So the antenna you would get for $75.00 plus shipping would be aluminum color, not the black
that is shown in the photo.

The antenna covers the entire 900 MHz band and has an estimated gain of 5 DBd at 50 ohms and has an female SMA connector at the front end.

Best wishes from ray, w6fya for Elk Antennas

2536. Re: a tutti i possessori di scanner!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4717-39C93726-49@storefull-111.iap.bryant.webtv.net>
Source record: 179973

If I read Ali Babb correctly, he has a scanner he would like to use to hear the exchanges on the working frequency(s) of the taxi service(s) in Rome. He asks anyone who knows the frequency(s) to post them or to send them to him.

Best regards, Richard Harrison, KB5WZI

2537. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d33dc7.80152413@news.seanet.com>
Source record: 179974

On Wed, 20 Sep 2000 15:18:26 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Fractenna wrote:
>> This thread is closed.
>>
>> NC
>
>There. That's how you close a thread, NC.
>
>xg

Hi Jim,

You sure? The method appears to be similar to another. Take care it
is not subject to a utility patent ("You may already be named a
plaintive") suit (and two pair of pants).

73's
Richard Clark, KB7QHC

2538. Re: Big Guns in a Pile-up

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8qbg2s$t90$1@nnrp1.deja.com>
Source record: 179975

I like it!

In article <gq2v5.959$kB1.2567@newsfeed.slurp.net>,
"David J. Windisch" <davidw@copper.net> wrote:
> How do you compare?
>
> See:
>
> http://www.stickdeath.com/bank.htm
>
> K3BHJ
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2539. Re: Help to build a dish of 4M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: KentWI <kentwi@ameritech.net>
Message-ID: <bRay5.10485$US.172455@nntp0.chicago.il.ameritech.net>
Source record: 179976
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

The gain of a 4 meter dish is 10dB???

"Glen Ross" <glen.ross@ntlworld.com> wrote in message
news:VA.00000520.004ab4b8@ntlworld.com...
>
> arno <r_no@hotmail.com> wrote:
>
>
> > Did you think i will be able to do some EME with a 4M dish ?
>
> No way. The gain of the dish is going to be less than 10dbd
>
> > What is the Focal that i have to use for this size of dish ?
>
> Depends on the geometry of the dish. You have to calculate it from the
diameter and
> depth of the dish,
>
> > How it will works for the 70cm (430Mhz) ?
>
> The gain will be around 13dbd.
>
> > And what focal I will need for this band ?
>
> See above.
>
> There is no way you will work EME with this setup unless your licence lets
you run
> around 10Kw output.
>
> A stack of 16 times 16 element yagis and you may be in with a chance.
>
> Glen G8MWR
>

2540. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C942A9.FEBF12DE@eznec.com>
Source record: 179977

"Ed Hare, W1RFI" wrote:
>
> The reason that antennas are compared to dipoles in free space (dBd) or an
> isotropic source (dBi) is that this allows the most meaningful comparison of
> antennas. If you know the gain in dBi or dBd of the antenna you want to
> compare the fractal to, you can easily subtract the difference and obtain
> the necessary comparision. IMHO, Fractal is quite correct in selecting a
> universally recognized standard for antenna gain.

dBd isn't as universally recognized as dBi. A number of people have argued long and loud on this newsgroup that dBd means "dB relative to a dipole at some height over ground" rather than relative to a dipole in free space. ARRL publications are among the very few which give an explicit definition; it's used in none of the standard academic or professional textbooks. So be prepared to be misunderstood when using dBd unless you carefully define it each time you use it.

In contrast, the definition of dBi is unambiguous.

Roy Lewallen, W7EL

2541. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C940EC.C65A09C0@uci.edu>
Source record: 179978

Richard Clark wrote:
>
> On Wed, 20 Sep 2000 15:18:26 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
> >There. That's how you close a thread, NC.
> >
> >xg
>
> Hi Jim,
>
> You sure? The method appears to be similar to another. Take care it
> is not subject to a utility patent ("You may already be named a
> plaintive") suit (and two pair of pants).
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

No, I'm not really sure. Maybe instead of being closed, the thread just changed from a tweed to a twill. But at least now the subject name of the thread is related to the topic of discussion.

73, Jim AC6XG

2542. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000920190139.27577.00000003@ng-fm1.aol.com>
Source record: 179979

Hi Tom--

>If he fails to do what he says, he will be known as a liar and a fraud...and probably be reminded of that fact by everyone. I'm sure he wouldn't choose that path, no matter how many people try to force him
down the road of "wussing out".<

You're right. I've been way too overprotective. The past few days alone, I warned of the potential for a little "ham radio fun" turning into a major Civil Rights violation against the LDS church. Then, I offered to lend out a $900 digital Bird power meter to resolve a power output question with finality instead of calculation. Now I'm trying to prevent a major financial calamity that would devistate a family.

Like the boy scout who helped the little old lady across the street who really didn't want to go, I'm being overzealous and controlling. I'll stop before some fool accuses me of trying to be too damn helpful.

73

Rick K1BQT

2543. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39C940F6.62021DAD@tpi.net>
Source record: 179980

Alex,
Go to any search engine and look for W4RNL , Cebic's site. He has more info than you will care to read and it is all factual, well worth your time. He compares many antenna designs and techniques, with little personal shading, he lets you draw your own conclusions. Great guy and site, I'm sure you will find something to help.

Good luck to you, I love your city, really enjoyed a holiday there.
Best wishes from ray, w6fya

alex wrote:

> Hi, All!!!
> I've readed alot from these postings, but i can't find the answer to my
> question. How to build a UHF-VHF antenna, maybe you know a web-site with all
> the sizes and parameters of antennas, or maybe you can explain it here?
>
> If it's important, I live in Canada, Quebec, Montreal.
>
> Waiting for reply!!!

2544. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920192902.23589.00000020@ng-cu1.aol.com>
Source record: 179981

>the definition of dBi is unambiguous.
>
>Roy Lewallen, W7EL
>

Accurate.

NC

2545. Re: from Elk Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193019.23589.00000022@ng-cu1.aol.com>
Source record: 179982

>Jenni,
>We (Elk Antennas) make a log periodic antenna designed for the 900 MHz
>band that might do the job for you. We sell it to people who have
>difficulty making credit card transactions with their modem.
>
>I am unsure as to how to make the connection to your transmitter, but
>you could buy an antenna and try several methods to see if one would
>work for you. The antenna is guaranteed, if you can't make it work
>within 30 days, just return it an we will send your money back, but this
>does not include shipping charges.
>If you give me your location, I could tell you how much it would cost to
>ship.
>
>There is a effective radiated power limit imposed to prevent cross
>transmission to an adjacent cell site, and it is up to you to not exceed
>that limit, although it sounds like you are in a fringe area and may not
>exceed it.
>
>I will include a picture of the antenna but with a extreme environment
>coating
>which costs an extra $10, which you probably would not need. So the
>antenna you would get for $75.00 plus shipping would be aluminum color,
>not the black
>that is shown in the photo.
>
>The antenna covers the entire 900 MHz band and has an estimated gain of
>5 DBd at 50 ohms and has an female SMA connector at the front end.
>
>Best wishes from ray, w6fya for Elk Antennas
>

Ray, why would anyone need a log periodic for 900 MHz?

73
Chip N1IR

2546. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193116.23589.00000024@ng-cu1.aol.com>
Source record: 179983

```
>
>Fractenna wrote:
>> >What was it that Rain Man kept saying over and over again?
>> >
>>
>> This thread is closed.
>>
>> NC
>
>No. I meant the other Rain Man.
>
>
>
>
>
>

This thread is closed.

NC
```

2547. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193048.23589.00000023@ng-cu1.aol.com>
Source record: 179984

```
>
>>
>>
>>This thread is closed.
>>
>>NC
>>
>>
>
>No its not!
>As anyone can see!
>Is anybody alive who survived Fractal Closed Open House?
>Please feel free to enlighten this NG, your opinion, remarks, experiences,
>what
>was learned, etc.
>This is thread, not a threat! And it is open, open, open!
>
>
>
>
>
>

This thread is closed.

NC
```

2548. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193214.23589.00000026@ng-cu1.aol.com>
Source record: 179985

>
>
>Fractenna wrote:
>> This thread is closed.
>>
>> NC
>
>There. That's how you close a thread, NC.
>
>xg
>
>
>
>
>
>
>

This thread is closed.

NC

2549. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193145.23589.00000025@ng-cu1.aol.com>
Source record: 179986

>
>
>Fractenna wrote:
>
>> >
>> ><klocko@toad.net> wrote:
>> >
>> >> If you mean the gain in the presence of the building or ground as
>> >> reflected in the pattern, I agree. Are you saying a loss through a
>> >> building should be factored into the gain or factored out? If it's an
>> >> absorption loss due to material (brick, wood, etc), I think I'd keep
>> >> that a separate term.
>> >
>> >Of course, if one is trying to do some sort of measurement of the gain of
>an
>> >antenna, ideally, the building wouldn't be a factor at all. :-) If a real
>> >world gain, if the building acts to add gain, I would figure it in; if it
>> >subtracts, I would figure that in, too. Otherwise, how would one
>> >differentiate between a gain change that was as a result of propagation
>loss
>> >through a building and one that is the result of the addition of more
>> >"parasitic elements" due to the building, which could just as easily
>detune
>> >the antenna and change the current and phase relationships and decrease
>the
>> >gain (and degrade the pattern) through that mechanism.
>> >
>> >> > As a last point of reference, over "average" ground, a half-wave
>> >> dipole up a
>> >> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
>> >> is a
>> >> > gain of about 5.2 dBd.
>> >
>> >> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
>> >> between dBi and dBd values.
>> >
>> >I picked a few nits, so you are welcome to do so. I usually round to the
>> >nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that
>there
>> >is a full 0.1 dB of precision between the model and reality.
>> >
>> >> One other point. Sometimes the ERP (the power at the antenna times the
>> >gain of the antenna referenced to a
>> >> half-wave dipole) is needed. The value of gain used in the calculation

>> >might then need to adjusted by that nasty little 2.15 dB
>> >> term.
>> >
>> >Yes, I think that the RF exposure regs, for example, exempt repeaters with
>> ><500 ERP from the need to be evaluated.
>> >
>> >73,
>> >Ed Hare, W1RFI
>> >
>> >
>> >
>> >
>> >
>> >
>> >
>> >
>> >
>>
>> This thread is closed.
>>
>> NC
>
>I hope by now you have created a macro to post that for you.
>
>
>
>
>
>
>

This thread is closed.

NC

2550. Re: N1IR OPEN HOUSE RETIRED THREAD

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920193254.23589.00000027@ng-cu1.aol.com>
Source record: 179987

This thread is closed.

NC

2551. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39C9483C.A469EBC3@bellatlantic.net>
Source record: 179988

Fractenna,

I posted two questions. By your reply, you have categorized
questions as "stupid idiotic crap". No one who categorizes
questions as "stupid idiotic crap" is helping hams out. Kudos,
like respect, are earned. Fractenna has done NOTHING on
this ng to earn either.

I await Dino's answer to those questions.

Fractenna wrote:

> >Dino wrote:
> >
> >> Maybe not, but the antenna works...and you can't argue that.
> >
> >What makes you say the antenna "works", and what do you
> >mean by "works"?
> >
> >Have you used a 10 M - or other ham band - fractal antenna?
> >
> >> Dino
> >>
>
> Look at the ham page
>
> http://www.fractenna.com/ham/hampage1.html
>
> and be a goody dooby and tell us what is wrong or misleading or just plain
> inaccurate about the performance the relative advantages or anything else.
> Go ahead and do everyone a favor and tell them what is wrong.
>
> From what I've seen of other ham antenna web pages this is perhaps the best
> documented antenna from a performnace and modeling standpoint on the web.
>
> Dr. Cohen should be getting major kudos for helping hams out. Not stupid
> idiotic crap like this from a few jerks.
>
> Phil
> de N1ZKT

2552. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39C9493C.1EA7773E@bellatlantic.net>
Source record: 179989

Chip,

Where do you find a complaint in the questions?

Fractenna wrote:

> >What makes you say the antenna "works", and what do you
> >mean by "works"?
> >
> >Have you used a 10 M - or other ham band - fractal antenna?
> >
> >> Dino
> >>
> >

> Either stop complaining or give something concrete that can be discussed.
>
> 73
> Chip N1IR

2553. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920194222.18611.00000097@ng-cu1.aol.com>
Source record: 179990

>I wonder if there are any practical experiences pointing to the best ground
>for
>HF for use with vertically polarized arrays.
>The question is what is better, situating the antennas on the beach next to
>the
>ocean, or is the salt marsh better.

Salt marsh.

Would waves have negative impact on the
>reflective properties of the salt water?

Yes. Your 'mirror' has time-varying distortions > 1/8 wave in amplitude.

Would salt marsh have perhaps more
>salt concentration and be better?

No. A bona fide salt marsh is salt water. If you are referring to brackish estuaries the difference will be minor.

Any BC experiences or studies?
>This thread is open :-)
>

BC experience will not relate to your HF issues--at least at LF BCB.

NC

>Yuri, K3BU
>

2554. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920194528.18611.00000098@ng-cu1.aol.com>
Source record: 179991

>Fractenna,
>
>I posted two questions. By your reply, you have categorized
>questions as "stupid idiotic crap". No one who categorizes
>questions as "stupid idiotic crap" is helping hams out. Kudos,
>like respect, are earned. Fractenna has done NOTHING on
>this ng to earn either.
>
>I await Dino's answer to those questions.
>
>Fractenna wrote:
>
>> >Dino wrote:
>> >
>> >> Maybe not, but the antenna works...and you can't argue that.
>> >
>> >What makes you say the antenna "works", and what do you
>> >mean by "works"?
>> >
>> >Have you used a 10 M - or other ham band - fractal antenna?
>> >
>> >> Dino
>> >>
>>
>> Look at the ham page
>>
>> http://www.fractenna.com/ham/hampage1.html
>>
>> and be a goody dooby and tell us what is wrong or misleading or just plain
>> inaccurate about the performance the relative advantages or anything else.
>> Go ahead and do everyone a favor and tell them what is wrong.
>>
>> From what I've seen of other ham antenna web pages this is perhaps the best
>> documented antenna from a performnace and modeling standpoint on the web.
>>
>> Dr. Cohen should be getting major kudos for helping hams out. Not stupid
>> idiotic crap like this from a few jerks.
>>
>> Phil
>> de N1ZKT
>

Fractenna is not a person.

I don't agree with Phil's word choice, but your comments are not worthy of this NG IMHO.

I know no one who has a fractal antenna who will now come on this NG. They have, rightly so, left it to me.

They just don't want the bullcrap from a few malcontents.

Don't blame'em.

Chip N1IR

2555. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920194735.18611.00000101@ng-cu1.aol.com>
Source record: 179992

>Chip,
>
>Where do you find a complaint in the questions?
>
>Fractenna wrote:
>
>> >What makes you say the antenna "works", and what do you
>> >mean by "works"?
>> >
>> >Have you used a 10 M - or other ham band - fractal antenna?
>> >
>> >> Dino
>> >>
>> >
>
>> Either stop complaining or give something concrete that can be discussed.
>>
>> 73
>> Chip N1IR
>
>

Who are you?

NC

2556. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d44b28.83577898@news.seanet.com>
Source record: 179993

On Wed, 20 Sep 2000 15:57:48 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Richard Clark wrote:
>>
>> On Wed, 20 Sep 2000 15:18:26 -0700, Jim Kelley <jwkelley@uci.edu>
>> wrote:
>> >There. That's how you close a thread, NC.
>> >
>> >xg
>>
>> Hi Jim,
>>
>> You sure? The method appears to be similar to another. Take care it
>> is not subject to a utility patent ("You may already be named a
>> plaintive") suit (and two pair of pants).
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Hi Richard,
>
>No, I'm not really sure. Maybe instead of being closed, the thread just
>changed from a tweed to a twill. But at least now the subject name of
>the thread is related to the topic of discussion.
>
>73, Jim AC6XG

Hi Jim,

Tweed or twill, Hmm? If the suit and pants are tailored with a cross
bias, they will drape better.

Let's not forget that the bobbin needs thread too. This is also on
topic because the bobbin can be said to be an (en)closed thread.

I won't even get into the software topic of writing "thread-safe"
methods. Hmm, there is consideration of thread starvation tho'....

73's
Richard Clark, KB7QHC

2557. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C94D12.91D73152@uci.edu>
Source record: 179994

Fractenna wrote:
> This thread is closed.
>
> NC

ur in the wrong thread, OM. That was the other one. This is MY thread
now, and I say it's open.

2558. Re: N1IR OPEN HOUSE RETARDED THREAD

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c95032.53224484@news.akorn.net>
Source record: 179995

On 20 Sep 2000 23:32:54 GMT, fractenna@aol.com (Fractenna) wrote:

>
>This thread is closed.
>
>NC

You can't close an unmoderated thread, but here is how Chip was shut
down on another forum...........

Date sent: Thu, 01 Apr 1999 17:43:34 -0500
To: antennas@qth.net
From: Larry Wilson <lwilson@cyberportal.net>
Subject: [Antennas] MODERATOR's NOTE
Send reply to: Larry Wilson <lwilson@cyberportal.net>

First, let me apologize for the recent outbursts on the list.

When I arrived home and saw an unusually large number of message in my

[antennas] box, I feared the worst. I took immediate action:

1) The address Fractenna@aol.com has been permanently removed from
this
list.

2) The list is once again on full moderation until the fire storm
subsides.

This is the third time I have had to take steps to protect the
integrity
of this list, and each time the above address was at the center of the

problem. I have been more than lenient. Certainly "three strikes and
you're out" is reasonable. Even so, had this been a first offence this

person's actions would have resulted in immediate dismissal.

Posting of private messages to the list accompanied by personal
attacks
will not be tolerated. This is a breech of any accepted standard of
conduct for email list usage! Personal attacks and name calling are
equally out of place.>>>

Fractenna is closed.

2559. Re: This thread is closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C9531B.8EE26508@mindspring.com>
Source record: 179996

Fractenna wrote:

> >
> >
> >Fractenna wrote:
> >> This thread is closed.
> >>
> >> NC
> >
> >There. That's how you close a thread, NC.
> >
> >xg
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

No. This thread is, "This thread is closed" You were also incorrect
about the other thread that you insisted was called closed. It was
obviously called, "N1IR OPEN HOUSE"

2560. Re: closed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C95383.B2EA7389@mindspring.com>
Source record: 179997

Fractenna wrote:

> >
> >
> >Fractenna wrote:
> >> This thread is closed.
> >>
> >> NC
> >
> >There. That's how you close a thread, NC.
> >
> >xg
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

There you go. This thread is ,"closed".

2561. Tuner vs Balun+choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <39c957c6_3@news1.prserv.net>
Source record: 179998

As I get older I get more confused, it seems.

I want to feed a loop cut for 20 meters, and use it on 40-10. The top of the loop can be opened at times to change the take-off angle. This antenna will have a wide range of impedances on various bands. I planned to feed it with ladder line and a tuner. HOWEVER, I see a lot of discussion about using coax + 4:1 (or 9:1) balun + choke "washers" for feeding a wide range of antennas.

Do these two methods (tuner and open line VS coax + balun+choke+no tuner) really compete with each other? A viable solution without a tuner would certainly be attractive, since that is one less thing to adjust. Also coax is easier to install than ladder line.

I am using a fairly modern solid-state rig (TenTec) that needs to see something close to 50 ohms.

I would really appreciate a short, high-level tutorial from someone like Roy, who explains things very clearly and correctly.

Bill Ogden, W2WO

2562. Re: N1IR OPEN HOUSE The continuing saga of the thread that chip has deemed closed but nobody else seems to give a rats ass what he wants and continues to post here anyway.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <b4misso6t9867f6dhnvggf1dalvj66mobn@4ax.com>
Source record: 179999

```
On or about Wed, 20 Sep 2000 17:09:54 -0500, sideband@mindspring.com,
using the forum rec.radio.amateur.antenna did say:

:
:
:Fractenna wrote:
:
:> >
:> >Fractenna wrote:
:> >
:> >> >Fractenna wrote:
:> >> >> >:>:>:>:>:Thos thread is closed.
:> >> >> >:>:>:>:>:
:> >> >> >:>:>:>:>:NC
:> >> >
:> >> >> >:>:>:This thread is closed.
:> >> >> >:>:>:>:
:> >> >> >:>:>:>:NC
:> >> >
:> >> >> >:>:>:This thread is closed.
:> >> >> >:>:>:
:> >> >> >:>:>:NC
:> >> >
:> >> >> >:This thread is closed.
:> >> >> >:>:
:> >> >> >:>:NC
:> >> >
:> >> >> This thread is closed.
:> >> >>
:> >> >> NC
:> >> >
:> >> >What was it that Rain Man kept saying over and over again?
:> >> >
:> >>
:> >> This thread is closed.
:> >>
:> >> NC
:> >
:> >No. I saw the movie and I am sure that wasn't it. Thanks for playing
:> >though.
:> >
:> >Hope this helps.
```

:> >
:> >
:> This thread is closed.
:>
:> NC
:
:If the thread was closed you wouldn't keep posting to it now would you?
:Besides, you already had your chance at answering the question and got it
:wrong. Now step aside little boy and let somebody else have a crack at it.
:
:Was it, "I'm a good driver. Yeah. I'm a really good driver. I like to
:drive. I'm a good driver." ?
:
:

I thought it was "Gotta be K-Mart underwear" and "Judge Wapner's on at
4"

::snicker::

-SSB

2563. Re: N1IR OPEN HOUSE RETARDED THREAD

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <adnissgq82873vholcmgkrrc02chh6sbdp@4ax.com>
Source record: 180000

Dayam!

And I thought I was the only one who thought those who use
"fractenna@aol.com" as their email address like to go to Long Island
for tea too much....

Just my two cents.

-SSB

On or about Wed, 20 Sep 2000 21:28:58 GMT, 2w8ji@contesting.com (Tom
W8JI), using the forum rec.radio.amateur.antenna did say:

:On 20 Sep 2000 23:32:54 GMT, fractenna@aol.com (Fractenna) wrote:
:
:>
:>This thread is closed.
:>
:>NC
:
:You can't close an unmoderated thread, but here is how Chip was shut
:down on another forum..........
:
:Date sent: Thu, 01 Apr 1999 17:43:34 -0500
:To: antennas@qth.net
:From: Larry Wilson <lwilson@cyberportal.net>
:Subject: [Antennas] MODERATOR's NOTE
:Send reply to: Larry Wilson <lwilson@cyberportal.net>
:
:First, let me apologize for the recent outbursts on the list.
:
:When I arrived home and saw an unusually large number of message in my
:
:[antennas] box, I feared the worst. I took immediate action:
:
:1) The address Fractenna@aol.com has been permanently removed from
:this
:list.
:
:2) The list is once again on full moderation until the fire storm
:subsides.
:
:This is the third time I have had to take steps to protect the
:integrity
:of this list, and each time the above address was at the center of the
:

:problem. I have been more than lenient. Certainly "three strikes and
:you're out" is reasonable. Even so, had this been a first offence this
:
:person's actions would have resulted in immediate dismissal.
:
:Posting of private messages to the list accompanied by personal
:attacks
:will not be tolerated. This is a breech of any accepted standard of
:conduct for email list usage! Personal attacks and name calling are
:equally out of place.>>>
:
:
:Fractenna is closed.

2564. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qbn80fru1@nntp9.atl.mindspring.net>
Source record: 180001

Yuri:

I have observed at least two AM BC stations and one HF short wave station that seem to fit your bill.

Salt Water MF BC:

One is WQAM in Miami, FL which used to have their antennas situated out by "Stiltsville" just South of Key Biscayne on the reef. The last time I sailed a boat out to those antennas, from the Dinner Key marina in South Miami was before hurricane Andrew went through and so they may not be there any more. But they were definitely over pure Atlantic ocean salt water. I know that the eye of Andrew passed almost directly over that site and I have never sailed Biscayne Bay since then and so don't know the current state of the towers.

Salt Marsh MF BC:

Then for the salt marsh, there is KPO in San Francisco Bay. The KPO AM BC transmitter towers sit directly on the salt marsh on the Eastern end of the Dumbarton Bridge at the very South end of San Francisco Bay. That SF Bay salt marsh is actually used by some "salt companies" to cultivate, harvest and sell sea salt. When you drive across the bridge you are only about a hundred yards from the towers.

Perhaps you could call or write to the Chief Engineers of those two AM BC stations for some inputs.

I have been up close to both transmitter sites looking for traces of "radials" but I could not see any. That does not mean there are not any radials just that I couldn't see them.

Salt Marsh SW BC:

Yuri, you should know about this one.

It is the International SW broadcast transmitter for Radio Canada [aka CBC] located on the Tantramar Marshes on the ismuth leading into the main part of Nova Scotia. Perhaps you could write or contact the chief engineer at that transmitter site for some information on HF antenna performance over salt marshes.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--

Yuri Blanarovich <k3bu@aol.com> wrote in message
news:20000920152750.23900.00000040@ng-fs1.aol.com...
> I wonder if there are any practical experiences pointing to the best
ground for
> HF for use with vertically polarized arrays.
> The question is what is better, situating the antennas on the beach next
to the
> ocean, or is the salt marsh better. Would waves have negative impact on
the
> reflective properties of the salt water? Would salt marsh have perhaps
more
> salt concentration and be better? Any BC experiences or studies?
> This thread is open :-)
>
> Yuri, K3BU

2565. Fractal paper... I wonder?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qbom6$pg6$1@slb7.atl.mindspring.net>
Source record: 180002

Thread:

"I wonder" Heh, heh...

Re: BU paper by Cohen and Hohlfield referenced below....

I wonder if that BU paper was peer reviewed?

I wonder how many papers in total were submitted to the conference?

I wonder how many were rejected? I wonder how many were accepted?

I wonder who the BU conference organizing committee was headed by?

I wonder who headed the peer review paper selection committee?

I wonder who was the technical program committee chairman?

I wonder who put out the "call for papers".

I wonder who selected the papers chosen for presentation.

I wonder how many really knoledgeable antenna folks actually attended that conference and spent the time to do a conscientious review of the papers.

I wonder...

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
.....

> The paper was given at a conference at Boston University and described at:
>
> http://www.spaceviews.com/2000/09/article3b.html
>
> The paper is by Cohen and Hohlfeld and is:
>
> "Mutual Figure of Merit In an Interstellar Intelligent Communications Link"
>
> The important results from said paper is that : 1) the link will be at
> microwave; 2) small dishes on receive (such as done by Seti League folks) are a
> waste of time;
> 3) the transmitter aperture, if doubling as a power collector (i.e. an

aperture
> engine) has a 4th power of the diameter dependence in the MFOM.
>
> Basically this shows that ad hoc descriptions of using the microwave
window,
> andthe ad hoc assumption of using large dishes are formally and globally
> correct--without any biases on modality; solid angle covered; or
wavelength to
> be used.
>
> Isn't EIRP wonderful?
>
> Sure hope someone can show I am using it right:-)!
>
> Chip N1IR
.....

--
Peter O. Brackett, K1PO
Morrisville, NC
--

2566. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qbpe2$b97$1@slb0.atl.mindspring.net>
Source record: 180003

Ed:

CONGRATULATIONS.

Once you get threatened with legal action from the Fractenna screen name, you then qualify for a Freaktor to be presented at the next annual award ceremony.

The ceremony happens right after the Wouf Hong ceremony and is chaired by IR1N an amateur who claims to be from Italy but who speaks with a Boston accent.

The Freaktor is sort of like the Oscar or Emmy, except rather than a figurine, it vaguely resembles a gold plated Koch.

Once you have the Freaktor in your possesion, why then DXCC honor roll first place pales in comparison.

After you are awarded the Freaktor by the NG, you then can qualify to compete for the All Thread Usenet Freaktor.

To do that you have to be threatened with legal action from the Fractenna screen name on at least 10 different NG threads.

BTW... the all time champion is Tom W8JI, he has 5 endorsements on his Freaktor!

Soon Ed you too will be among the honorable Freaktor holders.

Best,

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Dean Craft <w4ihk@mindspring.com> wrote in message
news:8qasaqoot3@slb1.atl.mindspring.net...
>
> Fractenna wrote in message
<20000920073321.07838.00000001@ng-da1.aol.com>...
> >>
> >>73,
> >>Ed Hare, W1RFI
> >>
> >>
> >

> >
> >My comments were not directed to you sir; furthermore I have asked you to
> stop
> >communicating with me.
> >
> >
> >NC
>
> Hang in there Ed. You have just about reached the pinnacle of success.
> Shortly, you will be warned that you are going to be sued. Then you will
be
> told that if you don't stop making comments in the public forum, that your
> employer will be requested to shut you up! Its gonna get rough...hang in
> there...you can endure!
>
> Dean Craft -- W4IHK
>
>
>

2567. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qbqna$194$1@slb7.atl.mindspring.net>
Source record: 180004

Ed:

Watch it!

You may not be humble enough to qualify to learn at the feet of the "master".

It seems that you have an unfortunate predeliction for asking tough questions!

Unfortunately with that kind of approach to being a student... [Asking questions? What???]

...you will probably never qualify to learn from the "master" Herr Dr. Professor, Ph.D.

For, don't you know, that there is simply no time for questions, questions waste time since you could easily find the information in the archives!

Asking questions? What??? And you call yourself a student! Jeeshhhh....

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
W1RFI <w1rfi@aol.com> wrote in message news:20000920214935.18580.00000116@ng-cu1.aol.com...
> >From: "George, W5YR" w5yr@att.net
>
> >Some people just have trouble dealing with *real* authority figures who
> >have a demonstrated track record for technical and professional
> >integrity.
>
> Well, I would like to agree about the integrity, but I do not consider myself
> an authority on antennas. I am here to learn, just like most everybody else.
>
> 73,
> Ed Hare, W1RFI

2568. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <p8cy5.819$mC.37499@monger.newsread.com>
Source record: 180005

My analysis of the double bazooka antenna appears in Chapter 18 of Reflections, which shows mathematically that the stubs contribute zilch to the bandwidth with respect to reducing the off-resonance reactance, but instead the bandwidth reduction is due entirely to the resistive losses in the coax. Its performance is similar to that of placing a dummy load in shunt with the terminals, or similar to the TF2D (or is it T2FD?), the wide band folded dipole with a 600-ohm resistor in the side opposite the feed terminals.

Those who believe the bandwidth improvement is great are apparently unaware that the bandwidth improvement result only from power loss due to loss in resistance. The results are truly disappointing.

Walt Maxwell, W2DU

2569. Re: Wave scrambler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39C96D6B.3FBF@rpi.edu>
Source record: 180006

Jynx wrote:
>
> On Wed, 20 Sep 2000 14:51:28 -0400, W4JLE scribbled:
> >Aside from the obvious, any comments from anyone in the cell phone industry
> >on the "internal Antenna" and the "Wave scrambler" advertised on TV and
> >featured at
> > www.makeyourcellphonesafe.com
> >
> >The main purpose of gathering data is to inform the Attorney General of
> >Georgia the need to investigate this fraud.
>
> Fools and their money need to be separated.
> I've got to believe the Attorney General of The State
> Of Georgia has far better wrongs to right.
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | OS/2
> Gunnison, Colorado | @ | Jonesy | linux __
> 7,703' -- 2,345m | frontier.net | DM68mn SK

It's actually funny, but there's enough doublespeak to prevent
prosecution (I think). They say that the products "will not affect
reception quality" - that means to me that it won't help it or hurt
it... Anyway, the little "scrambler" thingie appears to be a Faraday
screen that goes over the earpiece hole that's supposed to act like the
screen on the door of a microwave oven. IF the phone case were
shielded, and IF the screen were grounded, then it might actually make
SOME(if nearly unmeasurable) difference in RF bioabsorption. Lots of
IFs... I think these are products designed to be SOLD rather than
USED...

Curt Breneman
RPI Chemistry
KC2EBP

2570. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39C96AFD.2746@rpi.edu>
Source record: 180007

Tom W8JI wrote:
>
> Hi Richard,
>
> On Tue, 19 Sep 2000 21:38:35 -0500 (CDT), richardharrison@webtv.net
> (Richard Harrison) wrote:
>
> >According to Terman in his 4th edition of "Electronic and Radio
> >Engineering", page 871, the gain as a power ratio (not db) of a
> >nonresonant wire 2 wavelengths long is 6.5 when compared with an
> >isotropic radiator. (a power ratio of 4 is 6 db and a power ratio of 8
> >is 9 db)
> >
> >If this wire of 2 wavelengths is brought close to the ground it will
> >experience loss imposed by the soil`s imperfections. The soil is neither
> >a good conductor nor a good insulator. The severity of the loss depends
> >on the exact soil composition and how near the wire is placed to the
> >soil. The soil will eat away at the gain and directivity of the wire.
>
> Amen.
>
> To the tune of many many dB. If ground losses didn't "eat away at the
> gain" a great amount, the Beverage wouldn't work at all. It is the
> large amount of loss in the earth that allows the Beverage to work. At
> a height of .05 WL or less the wire would become a virtual
> transmission line over perfect ground, with the vertical ends the
> major source of radiation.
>
> We certainly can't compare a long wire a large fraction of a
> wavelength above earth to a Beverage .05 WL or less above earth!
>
> Even at a height 1/3 of its length, longwires experience so much
> current loss along their length due to coupling to lossy earth below
> the antenna and losses in the wire that gain reaches values lossless
> theory predicts. Actual measurements show longwires limit gain at a
> length between 3.3 and 4 wavelengths when installed at a height 1/3 of
> their length above earth.
>
> >Some Beverage antennas will retain some gain when close to the ground.
> >Some will not. It is simply a matter of whether the difference between
> >the antenna gain and the ground loss is a positive number.
>
> It's well established by hundreds of users Beverages suffer huge
> losses compared to antennas like properly installed verticals.

>
> Modeling programs agree totally with the results people see.
>
> Just like the TV antenna book about 1/4 wl folded dipoles making good
> antennas, the War Departmnent book is wrong
>
> 73 Tom

Isn't the point of a Beverage antenna to produce a low-noise (high S/N ratio) signal of around 10 db or less actual amplitude than a comparable longwire antenna?

Curt Breneman
RPI Chemistry
KC2EBP

2571. Re: Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <8q0cq8.flr.ln@mail.specsol.com>
Source record: 180008

jason_hsu@my-deja.com wrote:
> The first 6 questions in this section of the question pool ask for
> antenna radiation patterns for two-1/4 wavelength vertical antennas at
> different distances and fed at different phases. Does anyone have the
> formula? I can see what the answers are, but I want to know how I can
> derive them.

> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/

> Sent via Deja.com http://www.deja.com/
> Before you buy.

Simplistic answer:

1. A lot of math; there is no "simple" formula.

2. Model them with something like EZNEC (http://www.eznec.com) which does
the math for you.

I recommend #2.

Jim Pennino

2572. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E9DA.F8E37DCA@mindspring.com>
Source record: 180119

Fractenna wrote:

> >>Door. close. bridge. burn. Liason. History.
> >
> >Hmmm, a big difference in the dish-out vs take tolerance, eh? :-)
> >
> >73,
> >Ed Hare, W1RFI
> >
>
> Hardly.
>
> I have, in the past, received over 600 e-mails a week.

I hear that happens when you visit a lot of porn sites

> I must separate the
> wheat from the chaff.

You wouldn't chaff so badly if you used vaseline.

> I no longer answer ham fractal antenna requests, but
> direct them to the fractal antenna reflector.
>
> Some, like yourself, initially appear reasonable in approach and then reveal an
> inappropriate core.
>
> There are lots of other people you can talk to; I suggest you talk withh them.
>
> Cordially, NC.

--
The preceding may or may not have been authored by myself but I offer it to you for
your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I
refuse to use a
spell checker and don't take criticism well.

2573. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <n7qaq8.0ch.ln@mail.specsol.com>
Source record: 180120

Fractenna <fractenna@aol.com> wrote:

> To Readers:

> I have just sent a letter of complaint to Mr. Rauch's local police for his
> harassment and death threat. I will also be contacting the FBI once I have had
> a response from them.

> If I need to go to Georgia to press charges I will do so.

> Now: on measurements.

> The FQY measurements on the ham page were done at WK1O's QTH. He has about an
> acre of clear, flat, marshy terrain.

> See:

> http://www.fractenna.com/ham/hampage1.html

> NC

Since making a false accusation of felonies ("harassment and death threat")
would make a false accuser liable for civil damages, and if the accuser
identified himself as acting as an officer of a company, the company would
also be liable for civil damages if the accusations were false, there
exists the possibility of an ownership change in a certain antenna company.

Which leads one to wonder:

1. What would Tom's major product line be in his new company?
2. Would "Phil" still hava a job?

Jim Pennino

2574. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8qarl6$37r$1@nnrp1.deja.com>
Source record: 180121

Howard Stern is broadcast on some radio stations in Canada. You will
NOT hear Howard Stern's broadcast over the internet.

As for web sites, here is what I know about Howard Stern's web sites.

http://www.koam.com

This is NOT an official Howard Stern web site, but it is the most
popular.

http://www.howardstern.com

This IS the site owned by Howard Stern, but he does not wish to put up
a web site, but rather keeps anyone else from using it. He has a very
simple page of info there not meant to be an official web site.

In article <8qaft6$2rj$2@sunburst.ccs.yorku.ca>,
yu131537@yorku.ca wrote:
> Hi
>
> Perhaps my first message was not clear about this, I would like to
> learn the names of as many shock jocks as I can. In Canada we do not
> have shock jocks, I'd like to listen to one over the Internet.
>
> Thanks for your help!
>
> Stan
>
> Bob Miller <bamiller@texas.net> wrote:
>
> >yu131537@yorku.ca (stan miles) wrote:
>
> >>RanHefner <ranhefner@my-deja.com> wrote:
> >>
> >>>Why do you want to know, Stan?
> >>
> >>I'd like to see their websites.
>
> >Why don't you enter their "disk jockey" names into a search engine?
> >Those are the names their web sites would be under.
>
> >Howard Stearns and Don Imus, by the way, are their real names, I
> >believe.
>
> >Don is on WFAN. You might do a search for that web site.
>

> >Best...
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

2575. Re: Building helical antenna to span 470 to 850MHz (UHF TV)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Spencer Webb <webb@alum.mit.edu>
Message-ID: <Kb6y5.1012$2l.20315@news.shore.net>
Source record: 180122

Forget making the helix conical. Pick the geometric mean of your frequency edges, 632MHz, and build your helical to those dimensions. It will work, and will perform well over that broad bandwidth. Forget impedance matching, you'll have a 2:1 SWR with 75-ohm cable (about 140-ohm impedance when peripherally fed).

Helicals on a conical surface provide interesting tradeoffs in gain and bandwidth, but it is a complex issue. Standard helicals perform well over a 2:1 range, but not too much more.

Build it. I think you will be delightfully surprised.
--
-Spencer Webb
President
AntennaSys, Inc.
www.AntennaSys.com

Robert Casey <wa2ise@ix.netcom.com> wrote in message
news:39C83BD0.36C1443B@ix.netcom.com...
> Any ideas on how to build a helical antenna that can cover this
> wide of bandwidth? 470 to 850MHz (UHF TV channels 14 -69).
> Looking at the ARRL Handbook, 1978 edition, page 635 is
> a helical antenna for 432MHz. "Each turn is a wavelength long,
> with a pitch of 1/4 wavelength". Now could I build a helical
> with varying diameters of the turns? Imagine I have a cone
> that I wind the turns on, starting at a 4 inch diameter and
> tapering up to 8 inches. And the wire of the antenna spirals
> around the cone, the turns getting bigger as the cone gets
> wider. And then the base of the cone sits on a screen mesh.
>
> Would this work, give me some directionality and gain,
> and bandwidth? Figure it would feed 75 ohm coax to feed
> the TV set UHF tuner.
>

2576. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qaru6$pe8$1@iac5.navix.net>
Source record: 180123

This newsgroup is cancelled:
Now that makes as much sense as your sticking your fingers in your ears and
going naa naa na naa naa I don't here you....

Grow up Nathan before I group up your messages and publish them as an
abnormal psychology book.
--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message > This thread is closed.
>
> NC

2577. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8qasaooot1@slb1.atl.mindspring.net>
Source record: 180124

Arrow146 wrote in message <20000920115600.28468.00000031@ng-fc1.aol.com>...
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000920082524.08407.00000014@ng-cc1.aol.com...
>> >
>> >On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
>
>> To Readers:
>>
>> I have just sent a letter of complaint to Mr. Rauch's local police for
his
>> harassment and death threat. I will also be contacting the FBI once I
have
>>had a response from them.
>
>Someone here is Stupid. Don't want to mention any names.
>
>Who here is Stupid enough to think the police is going to have
>any interest in what was posted on an Antenna Newsgroup on
>the internet.
>
>Even so, the first action would be an investigation,
>They would start by reading the post of all involved.
>There conclusion would be someone is stupid,
>wonder who's name would come to mind.
>
>AL

I don't know but could it be the fellow that wondered aloud in print
recently why most hams think of him as the village idiot?

Dean -- W4IHK

2578. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8qasapoot2@slb1.atl.mindspring.net>
Source record: 180125

Ed Hare, W1RFI wrote in message ...
>
>Frankly, I had hoped that rec.radio.amateur.antenna would have less of this
>sort of goings on than rec.radio.amateur.policy, but apparently most
>newsgroups and discussion boards end up at this point sooner rather than
>later.
>
>73,
>Ed Hare, W1RFI
>
>

That generally happens in most corners of society when you have
personalities driven by professional jealousy coupled with inadequate
interpersonal skills.

Dean Craft -- W4IHK

2579. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8qasaqoot3@slb1.atl.mindspring.net>
Source record: 180126

Fractenna wrote in message <20000920073321.07838.00000001@ng-da1.aol.com>...
>>
>>73,
>>Ed Hare, W1RFI
>>
>>
>
>
>My comments were not directed to you sir; furthermore I have asked you to
stop
>communicating with me.
>
>
>NC

Hang in there Ed. You have just about reached the pinnacle of success. Shortly, you will be warned that you are going to be sued. Then you will be told that if you don't stop making comments in the public forum, that your employer will be requested to shut you up! Its gonna get rough...hang in there...you can endure!

Dean Craft -- W4IHK

2580. test - please ignore

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Paul Egan <pegan14@home.com>
Message-ID: <969488187.634738979@news>
Source record: 180127

```
test
```

2581. G5RV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <Wb7y5.201184$c5.4376928@news2.rdc1.on.home.com>
Source record: 180128

I have a G5RV antenna, and after reading the directions I cannot find a reference to which leg of the dipole gets attached to which connector on the balun. Does it matter which leg goes where?

Thanks,

Barry D.

2582. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C8FFE2.5D9@wt.net>
Source record: 180129

Arrow146 wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000920082524.08407.00000014@ng-cc1.aol.com...
> > >
> > >On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
>
> > To Readers:
> >
> > I have just sent a letter of complaint to Mr. Rauch's local police for his
> > harassment and death threat. I will also be contacting the FBI once I have
> >had a response from them.
>
> Someone here is Stupid. Don't want to mention any names.
>
> Who here is Stupid enough to think the police is going to have
> any interest in what was posted on an Antenna Newsgroup on
> the internet.
>
> Even so, the first action would be an investigation,
> They would start by reading the post of all involved.
> There conclusion would be someone is stupid,
> wonder who's name would come to mind.
>
> AL

And from what he posts, even the FBI is trying to ignore him. They seem
not to want to respond to him.I wonder why...I guess they have had their
Phil of him. I suspect the good ole boys down at the local Georgia PD.
are laughing their tails off also. MK
--
http://web.wt.net/~nm5k

2583. Help ISOPOLE 144

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Mike Souhrada <wb9iog@revealed.net>
Message-ID: <39C8F39C.C237CCA2@revealed.net>
Source record: 180130

A long shot on this but thought I'd try.
We had a big blow last week and my 2 meter antenna
shed its tip. The base mount cracked off and I need
to replace it.
Any chance there is a partial available in your junk
pile? All I need is the aluminum mount with three bolts
that attaches to the mast with the short rod that is mounted
to it.
I don't believe AWA is in business anymore. Might be that
some other firm bought that line.
Help in Iowa ,Tnx for reading.
Mike

2584. Q: Need HELP !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: hjm@totcon.com
Message-ID: <39c9016e.3055640@news.totcon.com>
Source record: 180131

I have a Mosley TA-33 Jr. (10, 15, and 20m) that I would like to
cut the 20m section down to 17m.
Does anyone have the info on how much to remove (cut) off each of
the three element ??

Thanks Hj (hjm@totcon.com)

2585. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C90313.6C7A4A7C@uci.edu>
Source record: 180132

Fractenna wrote:

> This thread is closed.

Ummm, Dr. Cohen? I think you have this newsgroup confused with your listserver.

These absent minded professors say the nuttiest things, don't they? ;-)

ac6xg

2586. Re: G5RV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C904A4.703F0BE2@oio.net>
Source record: 180133

Barry D wrote:
>
> I have a G5RV antenna, and after reading the directions I cannot find a
> reference to which leg of the dipole gets attached to which connector on the
> balun. Does it matter which leg goes where?
>
> Thanks,
>
> Barry D.

Barry,
It really doesn't make any difference.
'Doc

2587. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000920144921.01763.00000024@ng-cb1.aol.com>
Source record: 180134

Hi Jim--

You're right. Should it ever be demonstrated that someone's motive for making a "death threat" claim were part of a pattern of predacious retaliatory behavior, and if that a pattern included the issuance of similar false claims against others in the past where no tangible threat existed, the punitive damages could be huge!

Rick K1BQT

2588. Re: INFO: Combining Triband Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C905D6.CFCCA12D@oio.net>
Source record: 180135

Dan Bryden wrote:
>
> Gentlemen: Has anyone tried adding additional elements to a standard
> commercial triband yagi (Cushcraft A3S) I have an old Th3jr and thought
> there might be an advantage to adding a couple of directors to the A3S.
> The th3jr elements are light weight and would not require too much in
> the way of boom reinforcement. Could get 3dB or so. Any comments ?
> Thanks Dan WA6PXO

Dan,
You can add elements to the A3S, but extend the boom when you
do. You will get some 'gain' by adding elements, but not 3db per
element, by any means. I'm not sure it would be worth the effort.
After a point, the boom extension gets to be a real 'pain' to do
so that it's mechanically sound.
'Doc

2589. Wave scrambler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qb0vo$s2j$1@iac5.navix.net>
Source record: 180136

Aside from the obvious, any comments from anyone in the cell phone industry on the "internal Antenna" and the "Wave scrambler" advertised on TV and featured at
www.makeyourcellphonesafe.com

The main purpose of gathering data is to inform the Attorney General of Georgia the need to investigate this fraud.

2590. Re: Mobile use of AT50 w/TS50

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C90832.77A2398@oio.net>
Source record: 180137

RadioFreq0,
The AT-50 is more of a 'line flattener' than a full blown,
or wide range tuner. It will certainly work mobile, but don't
expect the frequency agility compared to a screwdriver. It
won't make a 'Hamstick' into an all band antenna.
There are a couple of modifications for the AT-50 that you
might as well do to start with. Any of the 'Mods' sections
of QRZ/Kenwood/(?) internet sites should have them. These
mods deal with compatibility problems , and will save you from
changing fuses a lot.
Mounting the AT-50 in the trunk, or as close to the antenna
as possible, is 'better' than having it at the radio end of
the feed line.
I've had two AT-50's, and ended up taking them out of line
both times (didn't know about the mods then). I haven't put
it back in-line yet, just too lazy, and got used to doing it
differently.
Good luck...
'Doc

2591. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C90854.80388FB5@uci.edu>
Source record: 180138

Fractenna wrote:
> This thread is closed.
>
> NC

From Merriam Websters Collegiate Dictionary -

idiot savant 1: a mentally defective person who exhibits exceptional skill or brilliance in some limited field; 2: a person who is highly knowledgeable about one subject but knows little about anything else

2592. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C908C3.2A042D16@uci.edu>
Source record: 180139

Fractenna wrote:

> >Really. I believe W1RFI was the first to ask for it. How do you find
> >it believable that people are responding to posts they don't read?
> >Also, please consider the fact that it takes no more time to answer a
> >question than it does to make insulting and condescending remarks to
> >them.
> >
> >73, Jim AC6XG
> >

> This thread is closed.

> NC

When ya can't take the heat, tell everybody to get out of the kitchen.

2593. Re: Crushcraft AV-5 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39C909E3.F6E0DEBA@oio.net>
Source record: 180140

kc4art@hotmail.com wrote:
>
> I just aquired a Crushcraft AV-5. It will be ground mounted. My
> question is about the radials. I am going to bury them so I don't have
> to take them up each time I mow. I am going to just lift up the sod
> and bury them about 3 inches or so. What I need to know is will it
> work to put each radial for the different bands in the same trench, or
> do I need to space them out from each other so they are not touching?
> I am thinking that I would need to keep them separated, but I'm not
> sure. Also, would radials for just 80m, 20m, and 10m work fine, or do
> I need to run ones for 40m and 15m also? I know idealy I would want a
> set for each band, but how much better would that be over what I would
> get for using the radials for just those 3 bands? Most of my operating
> is on 20m and 10m anyway. Thanks in advance for all your help.
>
> Lee Ratcliff
> KC4ART
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

Lee,
A good ground ~always~ helps an antenna, no matter what kind it
is.
Rather than a different length radial(s) for each band, use as many as
you can for the lowest band of use. You'll know when you should quit
adding radials. Back hurts, you become 'sick' of the whole idea, you
wonder why you ever thought you wanted a vertical, etc. At this
point,
add two more...
'Doc
PS - Best way to measure radials is by the mile.

2594. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13604-39C90AFA-3@storefull-114.iap.bryant.webtv.net>
Source record: 180141

Tom, W8JI wrote:
"---your book may say otherwise but that isn`t how it works."

In the days before TV there was a time when few radios had built-in antennas. Most broadcast listeners had a connection to ground and a more or less horizontal wire to receive transmissions of about 545 meters to 176 meters. These are wavelengths of about 1788 feet to 577 feet.

Most receiving antennas were only 50 or 100 feet long and only 20 or 30 feet above ground, because it worked and it was easy to do. Even at the high frequency end of the band, the height and length of the aerial wire was low and short in terms of the wavelength.

An antenna 20 feet off the ground receiving a 1 MHz, (wavelength of 300 meters or 984 ft.), signal is plenty near enough to the ground to see wave tilt.

An aerial only 75 feet long won`t have any net gain to speak of in the broadcast band, either. But, such wires worked reasonably well, and better in some directions than in other directions and thus they gave gain in the favored directions. The problem is that the ground, due to its closeness wipes out any gain. In non-favored directions, the ground not only wipes out the gain, but the loss also reduces some of the interference or whatever is in the non-favored directions.

A 75-foot wire is not a Beverage antenna at broadcast frequencies. You look for about 2 wavelengths. Even a "short Beverage" is usually 300 to 600 feet long. But if you had a half-mile of wire strung out and it were not at the bottom of a ditch or other ill-concieved site, you would have real gain. Some or all this gain could be wiped out by loss, but it isn`t necessarily so.

Best regards, Richard Harrison, KB5WZI

2595. Re: Wave scrambler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn8si3e3.na.X@animas.frontier.net>
Source record: 180142

On Wed, 20 Sep 2000 14:51:28 -0400, W4JLE scribbled:
>Aside from the obvious, any comments from anyone in the cell phone industry
>on the "internal Antenna" and the "Wave scrambler" advertised on TV and
>featured at
> www.makeyourcellphonesafe.com
>
>The main purpose of gathering data is to inform the Attorney General of
>Georgia the need to investigate this fraud.

Fools and their money need to be separated.
I've got to believe the Attorney General of The State
Of Georgia has far better wrongs to right.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

2596. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920152200.23900.00000036@ng-fs1.aol.com>
Source record: 180143

>
>I don't know but could it be the fellow that wondered aloud in print
>recently why most hams think of him as the village idiot?
>
>Dean -- W4IHK
>

He recently promoted himself to Big Town ID1OT - BTI

bada BUm

2597. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C90E1A.215@wt.net>
Source record: 180144

Jim Pennino wrote:

>
> Since making a false accusation of felonies ("harassment and death threat")
> would make a false accuser liable for civil damages, and if the accuser
> identified himself as acting as an officer of a company, the company would
> also be liable for civil damages if the accusations were false, there
> exists the possibility of an ownership change in a certain antenna company.
>
> Which leads one to wonder:
>
> 1. What would Tom's major product line be in his new company?

Fly swatters? MK
--
http://web.wt.net/~nm5k

2598. Re: G5RV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <xa8y5.201192$c5.4378124@news2.rdc1.on.home.com>
Source record: 180145

> I have a G5RV antenna, and after reading the directions I cannot find a
> reference to which leg of the dipole gets attached to which connector on
the
> balun. Does it matter which leg goes where?

>
> Barry,
> It really doesn't make any difference.
> 'Doc

Thanks Doc.

Barry D.

2599. Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920152750.23900.00000040@ng-fs1.aol.com>
Source record: 180146

I wonder if there are any practical experiences pointing to the best ground for HF for use with vertically polarized arrays.
The question is what is better, situating the antennas on the beach next to the ocean, or is the salt marsh better. Would waves have negative impact on the reflective properties of the salt water? Would salt marsh have perhaps more salt concentration and be better? Any BC experiences or studies?
This thread is open :-)

Yuri, K3BU

2600. Telerex TB4EC Specs.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: eugenebtm@webtv.net
Message-ID: <20512-39C90D48-25@storefull-616.iap.bryant.webtv.net>
Source record: 180147

Looking for specifications/info on this antenna .

Thanks. WB6BTM in Las Vegas, NV

2601. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C914B5.B3FB38AF@uci.edu>
Source record: 180148

Fractenna wrote:
> >:>:>:>:Thos thread is closed.
> >:>:>:>:
> >:>:>:>:NC

> >:>:>:This thread is closed.
> >:>:>:
> >:>:>:NC

> >:>:This thread is closed.
> >:>:
> >:>:NC

> >:This thread is closed.
> >:
> >:NC

> This thread is closed.
>
> NC

What was it that Rain Man kept saying over and over again?

2602. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39C91E34.A140AA6@uci.edu>
Source record: 180149

Fractenna wrote:
> My comments were not directed to you sir; furthermore I have asked you to stop
> communicating with me.

If that doesn't work, Chip, you could do what a lot of other people like
you do, and put your hands over your ears and hum real loud.

> My statement was clear. IF such a random loop exists, it, by definition of
> 'arbitrary', cannot be arbitrary in how it was chosen.
> If this were so, then it would be just as likely that its attribute would be
> shared by many, if not all, others.

Can you demonstrate or prove why only certain, particular (fractal)
shapes would have the performance characteristics of your antenna?

73, AC6XG

2603. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <7151-39C91C5E-21@storefull-112.iap.bryant.webtv.net>
Source record: 180150

Tom, W8JI wrote:
"Just like the 1/4 wl long folded dipole TV antennas? If it`s in a book, it must be right...eh?"

Not because it is in a book is it right. It is in a book because it is right.

A 1/2 wavelength of wire is resonant because its reactances add, at that length, to zero. A 1/2 wavelength of wire formed either into a loop or !/4 wavelength folded dipole may be resonant. Both have a high drivepoint resistance because their drivepoint terminals are 1/4 wavelength away from a short circuit.

The drivepoint resistance of the loop is typically 10,000 ohms or more. The drivepoint resistance of the 1/4 wavelength folded dipole is typically 4000 or 5000 ohms.

In either the loop or the dipole there is no reactance to limit current. The high antenna resistance must be matched for maximum power transfer, but it`s feasible.

Both the loop and folded dipole have gain over the isotropic radiator. In fact, even the itsy-bitsy elementary doublet has gain due to its directivity. Terman on page 871 of his E&RE book says the power gain (not db) over an isotropic is 1.5 for the elementary dipole. He also gives the gain of a 1/2 wave resonant wire as 1.64. So if you get current into the 1/4 wave dipole, there`s hardly a dime`s worth of difference between its performance and that of a 1/2 wave dipole.

Best regards, Richard Harrison, KB5WZI

2604. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c91dde.40338671@news.akorn.net>
Source record: 180151

On 20 Sep 2000 18:49:21 GMT, k1bqt@aol.com (K1BQT) wrote:

>Hi Jim--
>
>You're right. Should it ever be demonstrated that someone's motive for making
>a "death threat" claim were part of a pattern of predacious retaliatory
>behavior, and if that a pattern included the issuance of similar false claims
>against others in the past where no tangible threat existed, the punitive
>damages could be huge!
>
>Rick K1BQT

While I dislike my name being brought up, I don't think we should do anything that intimidates Chip and prevents him from doing what he has to do to preserve his reputation.

If he has to do what he claims he has to do to preserve his reputation, than I'll just have to suffer with the outcome.

If he fails to do what he says, he will be known as a liar and a fraud...and probably be reminded of that fact by everyone. I'm sure he wouldn't choose that path, no matter how many people try to force him down the road of "wussing out".

After all, he has a well-established reputation to uphold.

73 Tom

2605. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c92406.41914494@news.akorn.net>
Source record: 180152

On 20 Sep 2000 19:27:50 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>I wonder if there are any practical experiences pointing to the best ground for
>HF for use with vertically polarized arrays.
>The question is what is better, situating the antennas on the beach next to the
>ocean, or is the salt marsh better. Would waves have negative impact on the
>reflective properties of the salt water? Would salt marsh have perhaps more
>salt concentration and be better? Any BC experiences or studies?
>This thread is open :-)
>
>Yuri, K3BU

Hi Yuri,

I'd use regular old phil dirt mixed with assalt.

Run it through the chipper, and spread it out in many small well mixed
chunks.

Seriously, I'd think either one would be excellent! I don't know which
would be better.

2606. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C9257B.C1ABE86@mindspring.com>
Source record: 180153

Tom W8JI wrote:

> On 20 Sep 2000 18:49:21 GMT, k1bqt@aol.com (K1BQT) wrote:
>
> >Hi Jim--
> >
> >You're right. Should it ever be demonstrated that someone's motive for making
> >a "death threat" claim were part of a pattern of predacious retaliatory
> >behavior, and if that a pattern included the issuance of similar false claims
> >against others in the past where no tangible threat existed, the punitive
> >damages could be huge!
> >
> >Rick K1BQT
>
> While I dislike my name being brought up, I don't think we should do
> anything that intimidates Chip and prevents him from doing what he has
> to do to preserve his reputation.

Ritual suicide?

2607. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <tW9y5.713$u95.2305115@news.ntplx.net>
Source record: 180154

Fractenna <fractenna@aol.com> wrote:

> >The performance of the fractal quad appears to be just about what I would
> >expect from a 2-element gain antenna that size. The "fractal" approach
> >appears to do a nice job of relatively low-loss linear loading of the
elements.

> Stop right there. You have no idea what a fractal is, and what linear
loading
> is, if you say this.

That is a good reason for my use of the word "appears," NC (do you wish me to call you by NC when you sign NC and Chip when you sign Chip?). Unfortunately, I have not been able to find any information that really explains how a fractal design is different than linear loading, so until there is some, I am afraid that all most people can have is speculation.

> Please do not try to engage me in conversation. I do not believe that you
have
> a sufficient knowledge base to publicly inform others on this, and based
on
> your previous, inappropriate behavior, you do not deserve any further
> attentuion from me.

I am sorry, NC, but when you post publically, the public is quite free to post in response. If you choose not to respond to me, that is your choice.

> A linear loaded antenn cannot do what this antenna does.,

> Period.

Well, I think that the "period" is where the difficulty is found, NC. Most scientists who make statements support those statements with facts rather than periods.

> >Perhaps you should consider posting the model,

> No.

Your choice, but in witholding information that could support those things you say about the antenna, you cannot really take issue with those who do not fully understand the reasons for your statements.

> The last thing I am going to do is post a 200 wire model as a file on this
NG.

You could put it up as a link on your Web page. It really would help replace some of the contention over this issue with understanding.

73,
Ed Hare, W1RFI

2608. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <J%9y5.714$u95.2305498@news.ntplx.net>
Source record: 180155

sideband <sideband@cac.net> wrote:

> :Yes; they were made in comparison to a dipole. This is the convention in
> :antenna measurement, whenever possible. I am sorry you are not aware of
that.

> I was aware it was a convention to compare antennas to a dipole. I was
> asking a different question, for different data.

The reason that antennas are compared to dipoles in free space (dBd) or an isotropic source (dBi) is that this allows the most meaningful comparison of antennas. If you know the gain in dBi or dBd of the antenna you want to compare the fractal to, you can easily subtract the difference and obtain the necessary comparision. IMHO, Fractal is quite correct in selecting a universally recognized standard for antenna gain.

73,
Ed Hare, W1RFI

2609. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C92FE5.85DA9BF6@eznec.com>
Source record: 180156

Richard Harrison wrote:

> . . .
> Both the loop and folded dipole have gain over the isotropic radiator.
> In fact, even the itsy-bitsy elementary doublet has gain due to its
> directivity. Terman on page 871 of his E&RE book says the power gain
> (not db) over an isotropic is 1.5 for the elementary dipole. He also
> gives the gain of a 1/2 wave resonant wire as 1.64. So if you get
> current into the 1/4 wave dipole, there`s hardly a dime`s worth of
> difference between its performance and that of a 1/2 wave dipole.
>
> Best regards, Richard Harrison, KB5WZI

True. If loss is insignificant (or neglected), ANY antenna has gain in some direction(s) relative to an isotropic radiator. The isotropic radiator has the lowest possible gain of any 100% efficient antenna.

As you point out, the gain of an infinitesimally short dipole is less than 0.5 dB less than for a half wave dipole, if loss is ignored. In practice, loss can't be ignored for a very short dipole due to the heavy current involved. In addition, matching system loss becomes more and more significant as the dipole gets shorter. It's not hard to get a signal from a quarter wavelength dipole to be within a couple of dB of the signal from a half wavelength one. But it gets much tougher as you make it shorter because of the unavoidable realities of loss.

One other consideration when using a short dipole is bandwidth. The bandwidth will be much narrower than for a full sized dipole, unless the system is exceptionally lossy. So unless adjustable matching is used, practical operation will be limited to a narrow frequency range.

Roy Lewallen, W7EL

2610. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C92FEA.122597BE@att.net>
Source record: 180157

But what if he references it to a real dipole near the ground? Which already has 5+ dbd? I think that this is the issue which was trampled here in excretia several months ago.

I have gotten the impression that comparisons were made and reported elsewhere between near-ground-mounted antennas but reported in terms of dbd and dbi without making it clear that the ground-enhanced gain had been accounted for.

Several have made the point that near-ground dipole comparisons are of limited validity since "near- ground" and other near-field surroundings properties are not constant.

Ed, how about some Socratic wisdom in this area?

--
72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

"Ed Hare, W1RFI" wrote:
>
> sideband <sideband@cac.net> wrote:
>
> > :Yes; they were made in comparison to a dipole. This is the convention in
> > :antenna measurement, whenever possible. I am sorry you are not aware of
> that.
>
> > I was aware it was a convention to compare antennas to a dipole. I was
> > asking a different question, for different data.
>
> The reason that antennas are compared to dipoles in free space (dBd) or an
> isotropic source (dBi) is that this allows the most meaningful comparison of
> antennas. If you know the gain in dBi or dBd of the antenna you want to
> compare the fractal to, you can easily subtract the difference and obtain
> the necessary comparision. IMHO, Fractal is quite correct in selecting a
> universally recognized standard for antenna gain.
>
> 73,
> Ed Hare, W1RFI

2611. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920174112.21876.00000059@ng-co1.aol.com>
Source record: 180158

>
>Seriously, I'd think either one would be excellent! I don't know which
>would be better.
>
>

I am dissapointed, the most important question in the RF field and you dunno?
It doesn't help at all.

I wonder if way to test or measure it would be to try to see how much signal is
received on particular frequency in certain depth in the ocean or in the salty
mud. I speculate that less signal would indicate better, reflective ground
surface for them verticales?
I am hoping that someone has done the survey while looking for BC sites.
I am willing to travel to the best possible ground.

Tnx, Yuri

2612. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Nhay5.715$u95.2306656@news.ntplx.net>
Source record: 180159

sideband <sideband@cac.net> wrote:

> Dipoles vary, as do all antennas. A dipole tested at one site will
> perform slightly differently at another. Two different dipoles at the
> same site will perform slightly differently than each other.

Yes, to a relatively minor degree, but yes. This is why the term dBd has a half-wave dipole in free space as the reference antenna. If a dipole tested at one site will perform slightly differently than another, then the same thing could be said for the Yago or other reference antenna you are asking him to compare his antenna to. If the testing really were done on a calibrated antenna range, most of those site differences would be calibrated out. On a calibrated range, one can either apply power to an antenna, measure the field or power density at a particular point, and calculate the gain from that measurement (in that azimuth/elevation direction) or can A/B compare the measured power density against a reference antenna on the site (that presumably has very well documented performance). That is my general understanding of the subject; I am sure there are some on this NG who can add a lot to that generalization.

> It is the convention, yes, and it gives a certain set of data, yes.
> And that data is used to compare antennas, yes. But, as stated before,
> dipoles vary. Conditions at testing locations vary. Ground varies.

Which is why ONLY testing done at a calibrated antenna range can be seen as reasonably accurate. Modeling can be reasonably accurate too, to the extent that the model matches the conditions under which the antenna will be installed, or at least matches some reasonably agreed upon standard set of conditions. For the basis of comparing antennas, average ground conditions are usually acceptable as a reasonable basis for the model. The patterns that Chip has posted appear to have been modeled under those conditions, so I accept the results as a good first approximation of the performance of his antennas.

> So what exactly are you afraid of? This comparison between your Yagi,
> and any other Yagi of the same frequency range will only serve to show
> the merits of your rediced form factor design. I don't see what the
> big deal is here.

Then make the comparison; take the modeled gain figures of any Yagi, convert them to dBd and do the subtraction.

> Or is it that you don't want the world to know that in your FQY all
> they're getting is something that's only slightly better than a
> dipole, and directional?

If 3 dBd is "slightly better" than a dipole to you, then that is what you can infer from the data published on his page. But don't discount the value of "directional." Although that 3 dB won't make much difference on transmit with strong signals, that F/B can make quite a difference on receive (I would be curious to know how much that F/B varies across the 10 M band, though -- at least across the CW/digital/voice/FAX portion of the band; that is why I was hoping to get a NEC model. If any of you have typed it in from the dimensional data on the page, please email it to me; I just don't have time to input the data.) Not only will you not hear the signals off the sides and back, more important, you won't hear noise (local or atmospheric) off the sides and back, giving an improvement on receive > 3 dB in the resultant S/N. On receive, I would take 0 dBd gain and 25 dB F/B over a dipole any day.

And, in reality, the gain of 3 dBd for that 10M quad looks to be reasonable, and it is presented in a way that is relatively straigthforward.

I really don't see what the beef is wrt the antenna's performance claims.

73,
Ed Hare, W1RFI

2613. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920175355.09009.00000017@ng-cr1.aol.com>
Source record: 180160

```
>Fractenna wrote:
>> >:>:>:>:Thos thread is closed.
>> >:>:>:>:
>> >:>:>:>:NC
>
>> >:>:>:This thread is closed.
>> >:>:>:
>> >:>:>:NC
>
>> >:>:This thread is closed.
>> >:>:
>> >:>:NC
>
>> >:This thread is closed.
>> >:
>> >:NC
>
>> This thread is closed.
>>
>> NC
>
>What was it that Rain Man kept saying over and over again?
>

This thread is closed.

NC
```

2614. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fray5.716$u95.2307135@news.ntplx.net>
Source record: 180161

<klocko@toad.net> wrote:

> If you mean the gain in the presence of the building or ground as
> reflected in the pattern, I agree. Are you saying a loss through a
> building should be factored into the gain or factored out? If it's an
> absorption loss due to material (brick, wood, etc), I think I'd keep
> that a separate term.

Of course, if one is trying to do some sort of measurement of the gain of an antenna, ideally, the building wouldn't be a factor at all. :-) If a real world gain, if the building acts to add gain, I would figure it in; if it subtracts, I would figure that in, too. Otherwise, how would one differentiate between a gain change that was as a result of propagation loss through a building and one that is the result of the addition of more "parasitic elements" due to the building, which could just as easily detune the antenna and change the current and phase relationships and decrease the gain (and degrade the pattern) through that mechanism.

> > As a last point of reference, over "average" ground, a half-wave
> dipole up a
> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
> is a
> > gain of about 5.2 dBd.

> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
> between dBi and dBd values.

I picked a few nits, so you are welcome to do so. I usually round to the nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that there is a full 0.1 dB of precision between the model and reality.

> One other point. Sometimes the ERP (the power at the antenna times the
gain of the antenna referenced to a
> half-wave dipole) is needed. The value of gain used in the calculation
might then need to adjusted by that nasty little 2.15 dB
> term.

Yes, I think that the RF exposure regs, for example, exempt repeaters with <500 ERP from the need to be evaluated.

73,
Ed Hare, W1RFI

2615. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C9316F.D1E9897D@mindspring.com>
Source record: 180162

Fractenna wrote:

> >Fractenna wrote:
> >> >:>:>:>:Thos thread is closed.
> >> >:>:>:>:
> >> >:>:>:>:NC
> >
> >> >:>:>:This thread is closed.
> >> >:>:>:
> >> >:>:>:NC
> >
> >> >:>:This thread is closed.
> >> >:>:
> >> >:>:NC
> >
> >> >:This thread is closed.
> >> >:
> >> >:NC
> >
> >> This thread is closed.
> >>
> >> NC
> >
> >What was it that Rain Man kept saying over and over again?
> >
>
> This thread is closed.
>
> NC

No. I saw the movie and I am sure that wasn't it. Thanks for playing
though.

Hope this helps.

2616. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920180358.01775.00000050@ng-cb1.aol.com>
Source record: 180163

```
>
>Fractenna wrote:
>
>> >Fractenna wrote:
>> >> >:>:>:>:Thos thread is closed.
>> >> >:>:>:>:
>> >> >:>:>:>:NC
>> >
>> >> >:>:>:This thread is closed.
>> >> >:>:>:
>> >> >:>:>:NC
>> >
>> >> >:>:This thread is closed.
>> >> >:>:
>> >> >:>:NC
>> >
>> >> >:This thread is closed.
>> >> >:
>> >> >:NC
>> >
>> >> This thread is closed.
>> >>
>> >> NC
>> >
>> >What was it that Rain Man kept saying over and over again?
>> >
>>
>> This thread is closed.
>>
>> NC
>
>No. I saw the movie and I am sure that wasn't it. Thanks for playing
>though.
>
>Hope this helps.
>
>
>
>
>
>
>

This thread is closed.
```

NC

2617. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920180431.01775.00000051@ng-cb1.aol.com>
Source record: 180164

>
><klocko@toad.net> wrote:
>
>> If you mean the gain in the presence of the building or ground as
>> reflected in the pattern, I agree. Are you saying a loss through a
>> building should be factored into the gain or factored out? If it's an
>> absorption loss due to material (brick, wood, etc), I think I'd keep
>> that a separate term.
>
>Of course, if one is trying to do some sort of measurement of the gain of an
>antenna, ideally, the building wouldn't be a factor at all. :-) If a real
>world gain, if the building acts to add gain, I would figure it in; if it
>subtracts, I would figure that in, too. Otherwise, how would one
>differentiate between a gain change that was as a result of propagation loss
>through a building and one that is the result of the addition of more
>"parasitic elements" due to the building, which could just as easily detune
>the antenna and change the current and phase relationships and decrease the
>gain (and degrade the pattern) through that mechanism.
>
>> > As a last point of reference, over "average" ground, a half-wave
>> dipole up a
>> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
>> is a
>> > gain of about 5.2 dBd.
>
>> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
>> between dBi and dBd values.
>
>I picked a few nits, so you are welcome to do so. I usually round to the
>nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that there
>is a full 0.1 dB of precision between the model and reality.
>
>> One other point. Sometimes the ERP (the power at the antenna times the
>gain of the antenna referenced to a
>> half-wave dipole) is needed. The value of gain used in the calculation
>might then need to adjusted by that nasty little 2.15 dB
>> term.
>
>Yes, I think that the RF exposure regs, for example, exempt repeaters with
><500 ERP from the need to be evaluated.
>
>73,
>Ed Hare, W1RFI
>

>
>
>
>
>
>
>
>

This thread is closed.

NC

2618. Re: Wave scrambler

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qbc9f$3i0$1@iac5.navix.net>
Source record: 180165

Thank you for your informed and positive response.

"Jynx" <X@Y.Z.net> wrote in message
news:slrn8si3e3.na.X@animas.frontier.net...
> On Wed, 20 Sep 2000 14:51:28 -0400, W4JLE scribbled:
> >Aside from the obvious, any comments from anyone in the cell phone
industry
> >on the "internal Antenna" and the "Wave scrambler" advertised on TV and
> >featured at
> > www.makeyourcellphonesafe.com
> >
> >The main purpose of gathering data is to inform the Attorney General of
> >Georgia the need to investigate this fraud.
>
> Fools and their money need to be separated.
> I've got to believe the Attorney General of The State
> Of Georgia has far better wrongs to right.
>
> Jonesy
> --
> Marvin L Jones | jonz | W3DHJ | OS/2
> Gunnison, Colorado | @ | Jonesy | linux __
> 7,703' -- 2,345m | frontier.net | DM68mn SK
>

2619. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920180342.21870.00000064@ng-co1.aol.com>
Source record: 180166

>
>
>This thread is closed.
>
>NC
>
>

No its not!
As anyone can see!
Is anybody alive who survived Fractal Closed Open House?
Please feel free to enlighten this NG, your opinion, remarks, experiences, what was learned, etc.
This is thread, not a threat! And it is open, open, open!

2620. Re: N1IR OPEN HOUSE The continuing saga of the thread that chip has deemed closed but nobody else seems to give a rats ass what he wants and continues to post here anyway.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C935B2.9E2BBCC4@mindspring.com>
Source record: 180167

Fractenna wrote:

> >
> >Fractenna wrote:
> >
> >> >Fractenna wrote:
> >> >> >:>:>:>:Thos thread is closed.
> >> >> >:>:>:>:
> >> >> >:>:>:>:NC
> >> >
> >> >> >:>:>:This thread is closed.
> >> >> >:>:>:
> >> >> >:>:>:NC
> >> >
> >> >> >:>:This thread is closed.
> >> >> >:>:
> >> >> >:>:NC
> >> >
> >> >> >:This thread is closed.
> >> >> >:
> >> >> >:NC
> >> >
> >> >> This thread is closed.
> >> >>
> >> >> NC
> >> >
> >> >What was it that Rain Man kept saying over and over again?
> >> >
> >>
> >> This thread is closed.
> >>
> >> NC
> >
> >No. I saw the movie and I am sure that wasn't it. Thanks for playing
> >though.
> >
> >Hope this helps.
> >
> >
> This thread is closed.
>
> NC

If the thread was closed you wouldn't keep posting to it now would you? Besides, you already had your chance at answering the question and got it wrong. Now step aside little boy and let somebody else have a crack at it.

Was it, "I'm a good driver. Yeah. I'm a really good driver. I like to drive. I'm a good driver." ?

2621. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C93631.F9A8A207@mindspring.com>
Source record: 180168

Fractenna wrote:

> >
> ><klocko@toad.net> wrote:
> >
> >> If you mean the gain in the presence of the building or ground as
> >> reflected in the pattern, I agree. Are you saying a loss through a
> >> building should be factored into the gain or factored out? If it's an
> >> absorption loss due to material (brick, wood, etc), I think I'd keep
> >> that a separate term.
> >
> >Of course, if one is trying to do some sort of measurement of the gain of an
> >antenna, ideally, the building wouldn't be a factor at all. :-) If a real
> >world gain, if the building acts to add gain, I would figure it in; if it
> >subtracts, I would figure that in, too. Otherwise, how would one
> >differentiate between a gain change that was as a result of propagation loss
> >through a building and one that is the result of the addition of more
> >"parasitic elements" due to the building, which could just as easily detune
> >the antenna and change the current and phase relationships and decrease the
> >gain (and degrade the pattern) through that mechanism.
> >
> >> > As a last point of reference, over "average" ground, a half-wave
> >> dipole up a
> >> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
> >> is a
> >> > gain of about 5.2 dBd.
> >
> >> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
> >> between dBi and dBd values.
> >
> >I picked a few nits, so you are welcome to do so. I usually round to the
> >nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that there
> >is a full 0.1 dB of precision between the model and reality.
> >
> >> One other point. Sometimes the ERP (the power at the antenna times the
> >gain of the antenna referenced to a
> >> half-wave dipole) is needed. The value of gain used in the calculation
> >might then need to adjusted by that nasty little 2.15 dB
> >> term.
> >
> >Yes, I think that the RF exposure regs, for example, exempt repeaters with
> ><500 ERP from the need to be evaluated.
> >
> >73,

> >Ed Hare, W1RFI
> >
> >
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

I hope by now you have created a macro to post that for you.

2622. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920082524.08407.00000014@ng-cc1.aol.com>
Source record: 180169

>
>On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
>
>>That's right.. there's a comparison there between a dipole and the
>>FQY. Nothing comparing the FQY to any other directional antennae.
>>
>>So where do those numbers hide? The ones comparing the FQY to a
>>directional antenna, I mean.
>>
>>-SSB
>
>Careful sideband, Chip uses the worse comparison standards imaginable.
>
>If you read his tests carefully, you'll see they are all but
>meaningless.
>
>First, he is on a large rock ledge overlooking a major highway. From
>his house, you can see Boston and the Atlantic ocean.
>
>There are fences behind him, and large structures. His site is
>cluttered except for a clear shot across to Europe and Africa.
>
>It would be virtually impossible to tell how anything works in an
>environment like that, especially with his habitually sloppy
>measurement methods.
>
>73 Tom
>
>

To Readers:

I have just sent a letter of complaint to Mr. Rauch's local police for his harassment and death threat. I will also be contacting the FBI once I have had a response from them.

If I need to go to Georgia to press charges I will do so.

Now: on measurements.

The FQY measurements on the ham page were done at WK1O's QTH. He has about an acre of clear, flat, marshy terrain.

See:

http://www.fractenna.com/ham/hampage1.html

NC

2623. Antenna Efficiency (was: N1IR OPEN HOUSE)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <8qaaaj$8ph$1@freenet9.carleton.ca>
Source record: 180170

>>
>>Either way, it is moot; we are free to continue to discuss the points being
>>raised, with or without anyone's consent. I will continue to partipate to
>>the extent that the discourse remains civil.
>>
>>73,
>>Ed Hare, W1RFI
>>

Speaking of antenna efficiency, which was discussed earlier in the
previous thread, I see that SM3IEV's yagi analysis software has been
released into the public domain. It calculates antenna efficiency,
and also G/T for VHF/UHF yagis. It also has the freespace dimensions
for a number of good yagis for VHF and above.

It can be found at:

http://home.interact.se/~w100088/download.htm
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr
Check out the proposed Radio Regs at:
http://www.tc.gc.ca/GMDSS/English/intro_e.htm

2624. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <hdbhsss8qq1nlc5902lnfv6aqbnql0pg9o@4ax.com>
Source record: 180171

NC:

As I stated before, You haven't been reading all of what I've written.
Your sentance concerning the ERSATZ and WHANGboomer proves that.

I have been asking questions; you have yet to answer them.

Compare your Yagi, with any Yagi of your choice, on a calibrated
antenna farm, at a respectable testing facility, and let's see some
data. Interpolated comparisons could be inaccurate, so let's see the
real thing.

-SSB

On or about 20 Sep 2000 11:36:18 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:Just an abswer:
:
:It is the convention to compare ANY and ALL antenna being so tested with a
:dipole.
:
:Do you understand that if you compare a ERSATZ yagi to a dipole and a YUMYUM
:whngboomer to a dipole, that the ERSATZ and the WHANGboomer are thus
:comparable?
:
:As I said, you need to ask questions rather than assume incorrect knowldge.
:
:NC
:

2625. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <stbhssovv63mcdc4ajkiiv7c5i1sldrccf@4ax.com>
Source record: 180172

On or about 20 Sep 2000 11:45:24 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:General comment:
:
:This thread is closed. Go ahead and talk about whatever you want--elsewhere:
:but it has nothing to do with N1IR Open House and this I will continue to
:remind all that this thread is closed.
:
:Start another thread.
:
:NC

Seig Heil!

-SSB

2626. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <vubhsso7rm1etcecmnr6rpt8umpo1bfb22@4ax.com>
Source record: 180173

On or about 20 Sep 2000 11:37:48 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>
:>Thread:
:>
:>"I wonder" Heh, heh...
:>
:>Re: BU paper by Cohen and Hohlfield....
:>
:>I wonder if that BU paper was peer reviewed?
:>
:>I wonder how many papers in total were submitted to the conference?
:>
:>I wonder how many were rejected? I wonder how many were accepted?
:>
:>I wonder who the BU conference organizing committee was headed by?
:>
:>I wonder who headed the peer review paper selection committee?
:>
:>I wonder who was the technical program committee chairman?
:>
:>I wonder who put out the "call for papers". I wonder who selected the
:>papers chosen for presentation.
:>
:>I wonder how many really knoledgeable antenna folks actually attended that
:>conference and spent the time to do a conscientious review of the papers.
:>
:>I wonder...
:>
:> Peter
:>
:>--
:>Peter O. Brackett
:>Morrisville, NC
:>--
:>Fractenna <fractenna@aol.com> wrote in message
:>news:20000919081308.06614.00000259@ng-cc1.aol.com...
:>> >>From: fractenna@aol.com (Fractenna)
:>> >
:>> >>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
:>> >>my Sb220 and 10M FQY is flawed.
:>> >
:>> >I may have missed it, Chip; did you post the methods you used to

:>calculate
:>> >the
:>> >EIRP in the first place? I am especially curious about the gain of the
:>> >antenna
:>> >and by what generally accepted method it was derived (NEC model,
:>calibrated
:>> >antenna range, etc.) I think from there, the competent folks here can
:>> >quickly
:>> >tell you if your calculations are flawed, if you need such reassurance,
:>that
:>> >is. :-)
:>> >
:>> >73,
:>> >Ed Hare, W1RFI
:>> >
:>>
:>>
:>> Nope; I don't need any pats on the head OR back; but go take a look at the
:>> elevation power pattern comparison to a dipole (Fig 3) .
:>>
:>> http://www.fractenna.com/ham/hampage1.html
:>>
:>> I am a bit amused that HAMS assume I am the village idiot. Some anyway.
:>>
:>> EIRP= power to antenna times peak field strength (call it directivity if
:>you
:>> wish, some herehave been using the term wrong abd calling GAIN the same as
:>> DIRECTIVITY).
:>>
:>> If you wish to see how the EIRP figures into galactic SETI and the best
:>way to
:>> establish a link, , then I will send you a preprint in a few weeks to
:>W1RFI,
:>> if requested.
:>>
:>> The paper was given at a conference at Boston University and described
:>at:
:>>
:>> http://www.spaceviews.com/2000/09/article3b.html
:>>
:>> The paper is by Cohen and Hohlfeld and is:
:>>
:>> "Mutual Figure of Merit In an Interstellar Intelligent Communications
:>Link"
:>>
:>> The important results from said paper is that : 1) the link will be at
:>> microwave; 2) small dishes on receive (such as done by Seti League folks)
:>are a
:>> waste of time;
:>> 3) the transmitter aperture, if doubling as a power collector (i.e. an

:>aperture
:>> engine) has a 4th power of the diameter dependence in the MFOM.
:>>
:>> Basically this shows that ad hoc descriptions of using the microwave
:>window,
:>> andthe ad hoc assumption of using large dishes are formally and globally
:>> correct--without any biases on modality; solid angle covered; or
:>wavelength to
:>> be used.
:>>
:>> Isn't EIRP wonderful?
:>>
:>> Sure hope someone can show I am using it right:-)!
:>>
:>> Chip N1IR
:>
:>
:>
:>
:>
:>
:>
:>
:
:This thread is closed.
:
:NC

In other words, NC is saying "Yes, you're right. The implications you have raised are correct. Regardless, I am above you, and I'm not going to answer any more of your questions, as you are not worthy of my twisted and ill founded logic."

::chuckle::

-SSB

2627. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000920083604.29324.00000008@ng-cf1.aol.com>
Source record: 180174

>My comments were not directed to you sir; furthermore I have asked you to stop communicating with me.<

This is an open forum. Anybody can comment on any post--those are the Usegroup rules. If you don't like those rules, you are free to use E-mail, FAX, or some more private medium like your own your reflector where you can make up your own rules. On here, you can't.

Sorry. You don't get to "close threads" and you don't get to say who can comment and who may not.

Rick K1BQT

2628. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920085323.18629.00000005@ng-cu1.aol.com>
Source record: 180175

>
>On or about 20 Sep 2000 11:37:48 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>
>:>
>:>Thread:
>:>
>:>"I wonder" Heh, heh...
>:>
>:>Re: BU paper by Cohen and Hohlfield....
>:>
>:>I wonder if that BU paper was peer reviewed?
>:>
>:>I wonder how many papers in total were submitted to the conference?
>:>
>:>I wonder how many were rejected? I wonder how many were accepted?
>:>
>:>I wonder who the BU conference organizing committee was headed by?
>:>
>:>I wonder who headed the peer review paper selection committee?
>:>
>:>I wonder who was the technical program committee chairman?
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>:>I wonder who put out the "call for papers". I wonder who selected the
>:>papers chosen for presentation.
>:>
>:>I wonder how many really knoledgeable antenna folks actually attended that
>:>conference and spent the time to do a conscientious review of the papers.
>:>
>:>I wonder...
>:>
>:> Peter
>:>
>:>--
>:>Peter O. Brackett
>:>Morrisville, NC
>:>--
>:>Fractenna <fractenna@aol.com> wrote in message
>:>news:20000919081308.06614.00000259@ng-cc1.aol.com...
>:>> >>From: fractenna@aol.com (Fractenna)
>:>> >
>:>> >>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
>:>> >>my Sb220 and 10M FQY is flawed.
>:>> >

>:>> >I may have missed it, Chip; did you post the methods you used to
>:>calculate
>:>> >the
>:>> >EIRP in the first place? I am especially curious about the gain of the
>:>> >antenna
>:>> >and by what generally accepted method it was derived (NEC model,
>:>calibrated
>:>> >antenna range, etc.) I think from there, the competent folks here can
>:>> >quickly
>:>> >tell you if your calculations are flawed, if you need such reassurance,
>:>that
>:>> >is. :-)
>:>> >
>:>> >73,
>:>> >Ed Hare, W1RFI
>:>> >
>:>>
>:>>
>:>> Nope; I don't need any pats on the head OR back; but go take a look at
>the
>:>> elevation power pattern comparison to a dipole (Fig 3) .
>:>>
>:>> http://www.fractenna.com/ham/hampage1.html
>:>>
>:>> I am a bit amused that HAMS assume I am the village idiot. Some anyway.
>:>>
>:>> EIRP= power to antenna times peak field strength (call it directivity if
>:>you
>:>> wish, some herehave been using the term wrong abd calling GAIN the same
>as
>:>> DIRECTIVITY).
>:>>
>:>> If you wish to see how the EIRP figures into galactic SETI and the best
>:>way to
>:>> establish a link, , then I will send you a preprint in a few weeks to
>:>W1RFI,
>:>> if requested.
>:>>
>:>> The paper was given at a conference at Boston University and described
>:>at:
>:>>
>:>> http://www.spaceviews.com/2000/09/article3b.html
>:>>
>:>> The paper is by Cohen and Hohlfeld and is:
>:>>
>:>> "Mutual Figure of Merit In an Interstellar Intelligent Communications
>:>Link"
>:>>
>:>> The important results from said paper is that : 1) the link will be at
>:>> microwave; 2) small dishes on receive (such as done by Seti League folks)

>:>are a
>:>> waste of time;
>:>> 3) the transmitter aperture, if doubling as a power collector (i.e. an
>:>aperture
>:>> engine) has a 4th power of the diameter dependence in the MFOM.
>:>>
>:>> Basically this shows that ad hoc descriptions of using the microwave
>:>window,
>:>> andthe ad hoc assumption of using large dishes are formally and
>globally
>:>> correct--without any biases on modality; solid angle covered; or
>:>wavelength to
>:>> be used.
>:>>
>:>> Isn't EIRP wonderful?
>:>>
>:>> Sure hope someone can show I am using it right:-)!
>:>>
>:>> Chip N1IR
>:>
>:>
>:>
>:>
>:>
>:>
>:>
>:>
>:
>:This thread is closed.
>:
>:NC
>
>In other words, NC is saying "Yes, you're right. The implications you
>have raised are correct. Regardless, I am above you, and I'm not going
>to answer any more of your questions, as you are not worthy of my
>twisted and ill founded logic."
>
>::chuckle::
>
>-SSB
>
>
>
>
>
>
>
>

This thread is closed.

NC

2629. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920085556.18629.00000006@ng-cu1.aol.com>
Source record: 180176

>Tom:
>
>That's the point. I'm wondering if he's ever had his antennas tested
>at a lab, a calibrated farm, or anything of the sort. I've asked
>before, and gotten no answers, so I figured maybe this was a way to
>get that data.
>
>Maybe it's naieve of me to think that fractenna will be forthcoming
>with data on his "new exciting technology", blow out the hype, and get
>down and dirty with some real numbers. ::shrug::
>
>-SSB
>
>On or about Wed, 20 Sep 2000 09:22:57 GMT, 2w8ji@contesting.com (Tom
>W8JI), using the forum rec.radio.amateur.antenna did say:
>
>:On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
>:
>:>That's right.. there's a comparison there between a dipole and the
>:>FQY. Nothing comparing the FQY to any other directional antennae.
>:>
>:>So where do those numbers hide? The ones comparing the FQY to a
>:>directional antenna, I mean.
>:>
>:>-SSB
>:

I test antennas almost everyday. Fractal Antenna Systems, Inc. has a reduced reflection compact range.

I have reported the MI2 results here, on this NG, several times. The measurements have been published--several times.

I have reported them elsewhere on other internet forums--several times.

Your ignorance is not someone else's failure.

NC

2630. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <iedhssgd5a73e7ea5ckr9mja1708u5mh4v@4ax.com>
Source record: 180177

On or about 20 Sep 2000 12:55:56 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>Tom:
:>
:>That's the point. I'm wondering if he's ever had his antennas tested
:>at a lab, a calibrated farm, or anything of the sort. I've asked
:>before, and gotten no answers, so I figured maybe this was a way to
:>get that data.
:>
:>Maybe it's naieve of me to think that fractenna will be forthcoming
:>with data on his "new exciting technology", blow out the hype, and get
:>down and dirty with some real numbers. ::shrug::
:>
:>-SSB
:>
:>On or about Wed, 20 Sep 2000 09:22:57 GMT, 2w8ji@contesting.com (Tom
:>W8JI), using the forum rec.radio.amateur.antenna did say:
:>
:>:On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
:>:
:>:>That's right.. there's a comparison there between a dipole and the
:>:>FQY. Nothing comparing the FQY to any other directional antennae.
:>:>
:>:>So where do those numbers hide? The ones comparing the FQY to a
:>:>directional antenna, I mean.
:>:>
:>:>-SSB
:>:
:
:
:I test antennas almost everyday. Fractal Antenna Systems, Inc. has a reduced
:reflection compact range.
:
:I have reported the MI2 results here, on this NG, several times. The
:measurements have been published--several times.
:
:I have reported them elsewhere on other internet forums--several times.
:
:Your ignorance is not someone else's failure.
:
:NC

Your mind is closed

-SSB

2631. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920091325.18629.00000007@ng-cu1.aol.com>
Source record: 180178

>Compare your Yagi, with any Yagi of your choice, on a calibrated
>antenna farm, at a respectable testing facility, and let's see some
>data. Interpolated comparisons could be inaccurate, so let's see the
>real thing.

Nope.

I will never, ever, do that.

The dipole is the benchmark. It is the convention.

If, as a CB'er, you require a different 'standard', then I suggest that at least some CB'ers need a better education in antennas.

I can suggest books if you have a serious interest.

NC

2632. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920092013.21791.00000020@ng-co1.aol.com>
Source record: 180179

>
>This thread is closed.
>
>NC
>
>

Public notis:
This tred is reopen.
Where are the notes from the closed open house by participants? We are dying to see their report. How many people arrested? Was police able to handle the crowds? What was the real number of attendees? How did they fit into fractal shack?
Hello? Anyone out there who was there for real (besides the usual crowd of Freaktennas)?
I couldn't get bullet proof vest, was affraid to go.

BUm

2633. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <d9ehsso7frh5bt83q83v4m09e9ga1ab72o@4ax.com>
Source record: 180180

Again, NC, you get it wrong.

I am not a CB'er. I'm a CB operator. The only thing holding me back from getting my license is morse code, and that due to a form of dyslexia that apparently the FCC doesn't recognise, but the medical community does. This was a feeble attempt at an insult, Herr Doctor, and should be below someone who has purportedly had a higher education.

Dipoles vary, as do all antennas. A dipole tested at one site will perform slightly differently at another. Two different dipoles at the same site will perform slightly differently than each other.

It is the convention, yes, and it gives a certain set of data, yes. And that data is used to compare antennas, yes. But, as stated before, dipoles vary. Conditions at testing locations vary. Ground varies.

So what exactly are you afraid of? This comparison between your Yagi, and any other Yagi of the same frequency range will only serve to show the merits of your rediced form factor design. I don't see what the big deal is here.

Or is it that you don't want the world to know that in your FQY all they're getting is something that's only slightly better than a dipole, and directional?

Oh, and while you go about spouting your involvement in radio astronomy, I'll have you know I'm involved in the SETI project as well. You don't have the market cornered on this one either.

-SSB

On or about 20 Sep 2000 13:13:25 GMT, fractenna@aol.com (Fractenna), using the forum rec.radio.amateur.antenna did say:

:>Compare your Yagi, with any Yagi of your choice, on a calibrated
:>antenna farm, at a respectable testing facility, and let's see some
:>data. Interpolated comparisons could be inaccurate, so let's see the
:>real thing.
:
:Nope.
:
:I will never, ever, do that.
:
:The dipole is the benchmark. It is the convention.
:
:If, as a CB'er, you require a different 'standard', then I suggest that at

:least some CB'ers need a better education in antennas.
:
:I can suggest books if you have a serious interest.
:
:NC

2634. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <eb7IOUsiinMSIFZRNhLLp2Fe8Q1C@4ax.com>
Source record: 180181

yu131537@yorku.ca (stan miles) wrote:

>RanHefner <ranhefner@my-deja.com> wrote:
>
>>Why do you want to know, Stan?
>
>I'd like to see their websites.

Why don't you enter their "disk jockey" names into a search engine?
Those are the names their web sites would be under.

Howard Stearns and Don Imus, by the way, are their real names, I
believe.

Don is on WFAN. You might do a search for that web site.

Best...

Bob
k5qwg

>
>Please help me - thus far I did not get any info...
>
>Thanks
>
>s
>
>>In article <8q7qrv$9m2$4@sunburst.ccs.yorku.ca>,
>> yu131537@yorku.ca wrote:
>>> Hello Everyone
>>>
>>> May I please ask for your help. I am sorry to be a little off topic,
>>> but the other newsgroups devoted to radio seem to be a lot less
>>> popular then this group.
>>>
>>> Could you please tell me the names of shock jocks like Howard Stern,
>>> Don Imus, Mancow Muller? It would also help if I knew the names of
>>> the radio stations they work for. Would you know of
>>> websites/newsgroups where I could find this info?
>>>
>>> Thanks a lot, I would truly appreciate your help!!
>>>
>>> Stan
>>>
>>>

>
>>--
>>Randy A. Hefner
>>http://talk.to/frs
>>http://go.to/qx3
>>http://come.to/funnynews
>
>
>>Sent via Deja.com http://www.deja.com/
>>Before you buy.
>

2635. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: yu131537@yorku.ca
Message-ID: <8qaft6$2rj$2@sunburst.ccs.yorku.ca>
Source record: 180182

Hi

Perhaps my first message was not clear about this, I would like to learn the names of as many shock jocks as I can. In Canada we do not have shock jocks, I'd like to listen to one over the Internet.

Thanks for your help!

Stan

Bob Miller <bamiller@texas.net> wrote:

>yu131537@yorku.ca (stan miles) wrote:

>>RanHefner <ranhefner@my-deja.com> wrote:
>>
>>>Why do you want to know, Stan?
>>
>>I'd like to see their websites.

>Why don't you enter their "disk jockey" names into a search engine?
>Those are the names their web sites would be under.

>Howard Stearns and Don Imus, by the way, are their real names, I
>believe.

>Don is on WFAN. You might do a search for that web site.

>Best...

2636. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qai02$l57$1@neptunium.btinternet.com>
Source record: 180183

Brian, welcome aboard. You arrived in good time. We've
just spliced the mainbrace. Get this mug of untaxed rum
down your inside. Hic !

Reg
==========

Brian sez -
> . . . thus the window opens on the Second Boston Tea Party
. .

2637. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qaibo$k20$1@iac5.navix.net>
Source record: 180184

As suggested to Phil, let me suggest to you as well that you engage in an autoerotic experience...

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000920082524.08407.00000014@ng-cc1.aol.com...
> >
> >On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:

> To Readers:
>
> I have just sent a letter of complaint to Mr. Rauch's local police for his
> harassment and death threat. I will also be contacting the FBI once I have had
> a response from them.
>
> If I need to go to Georgia to press charges I will do so.
> NC

2638. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <3pihss0gqf0c16omgs81llmkj1muqbsie4@4ax.com>
Source record: 180185

On Tue, 19 Sep 2000 18:32:52 -0500, "Crazy George" <munschNO@attglobal.net.SPAM> wrote:

>Gary et al:
>This is just the tip of the iceberg, unfortunately. Spread Spectrum is not
>LPI, only with narrow band search equipment. Put a good analog spectrum
>analyzer on it. What you see is all energy in the passband. And, energy in
>the passband = interference.

Yeah, but if the spectrum is sufficiently whitened, and sufficiently dispersed, it should merge with the noise floor of the analog spectrum analyzer, and not produce more than a slight degradation of the SNR of conventional narrowband equipment, when operated at any reasonable physical separation.

(If you get close enough to the source, you will be able to see it as a hump on the spectrum analyzer, of course. That's the classic near-far problem with SS systems. But with a reasonable separation, the energy disappears into the noise floor for any receiving system except one using the same spreading code. That can despread the signal and recover enough energy to produce a positive SNR.)

But the problem here is that some of the stuff being installed doesn't have a sufficiently whitened spectrum and/or has insufficient dispersal. It has pronounced spectral lines with sufficient energy to bother analog systems such as the broadcast remote pickup receiver I mentioned. The fact that it puts a buzz on a 443 MHz FM receiver when it is operating in the 2.4 GHz band is another indication that strong spectral lines are present (and mixing somewhere on site to produce products that get through the repeater receiver's filters.)

SS technique isn't the problem, poorly designed SS equipment is the problem.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2639. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qajg4kkb1@iac5.navix.net>
Source record: 180186

From this point forward I guess we should address Tom who holds #N1IR as his internet radio designation. I understand that at some point he is planning an open house. Ergo the header no longer refers to Chip.

--

Fred W4JLE
http://w4jle.com/

"Fractenna" <fractenna@aol.com> wrote in message news:20000920074524.07873.00000002@ng-da1.aol.com...
> General comment:
>
> This thread is closed. Go ahead and talk about whatever you want--elsewhere:
> but it has nothing to do with N1IR Open House and this I will continue to
> remind all that this thread is closed.
>
> Start another thread.
>
> NC

2640. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39C8D2D2.E749D627@hiwaay.net>
Source record: 180187

Ed- your are being kind. The truth is that the great Guru has spoken ,
but the peasants are not listening. He is going to continue to try to
close the thread until either it is, or we get tired of his silly
behavior.
Bill-W4BSG

"Ed Hare, W1RFI" wrote:
>
> sideband <sideband@cac.net> wrote:
>
> > Others still have ideas to discuss, NC. Are you now becoming
> > Hitleresque and removing their freedom of speech?
>
> > Oh, please, do tell.
>
> I can think of a number of possiblities. He may be having a newsreader
> problem, although I have never heard of the AOL newsreader repeatedly
> re-posting the same response. He may have realized that the points that
> everyone raised are really correct and he wishes to cede them and move on.
> He may really be trying to end this particular discussion, however I fear
> that his approach will have just the opposite effect. Perhaps if he had
> kindly pointed out that the thread has mutated a bit and that it is time for
> a subject change, the rest of us would probably agree that doing so is
> appropriate usenet netiquette and do so. Repeatedly declaring threads
> "closed" on an unmoderated newsgroup is not considered good netiquette, in
> most circles.
>
> Either way, it is moot; we are free to continue to discuss the points being
> raised, with or without anyone's consent. I will continue to partipate to
> the extent that the discourse remains civil.
>
> 73,
> Ed Hare, W1RFI

2641. INFO: Combining Triband Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dan Bryden <dan.bryden@boeing.com>
Message-ID: <39C8D28D.CC569358@boeing.com>
Source record: 180188

Gentlemen: Has anyone tried adding additional elements to a standard commercial triband yagi (Cushcraft A3S) I have an old Th3jr and thought there might be an advantage to adding a couple of directors to the A3S. The th3jr elements are light weight and would not require too much in the way of boom reinforcement. Could get 3dB or so. Any comments ? Thanks Dan WA6PXO

2642. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000920115600.28468.00000031@ng-fc1.aol.com>
Source record: 180189

"Fractenna" <fractenna@aol.com> wrote in message
news:20000920082524.08407.00000014@ng-cc1.aol.com...
> >
> >On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:

> To Readers:
>
> I have just sent a letter of complaint to Mr. Rauch's local police for his
> harassment and death threat. I will also be contacting the FBI once I have
>had a response from them.

Someone here is Stupid. Don't want to mention any names.

Who here is Stupid enough to think the police is going to have
any interest in what was posted on an Antenna Newsgroup on
the internet.

Even so, the first action would be an investigation,
They would start by reading the post of all involved.
There conclusion would be someone is stupid,
wonder who's name would come to mind.

AL

2643. Re: Crushcraft AV-5 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dan Bryden <dan.bryden@boeing.com>
Message-ID: <39C8DB9F.13931028@boeing.com>
Source record: 180190

Lee, Most important for ground mounted Marconi antennas is the conductivity of the ground and that it be clear of obstructions. There is not a strict requirement for exact length of radials when mounted on the ground as there is when it is configured as a ground plane. The radials on the ground just make up for poor ground conductivity. If the ground is conductive the radials are less important. I use a full size Marconi antenna on the ground for 40 and 30 meters with just one radial of about 25 feet. The antenna works well and has a very flat swr. The more radials the merrier but practically speaking you quickly reach a point of diminishing returns. I would try it without radials first and then add some and see if the signal reports change. Good luck, Dan WA6PXO

kc4art@hotmail.com wrote:
>
> I just aquired a Crushcraft AV-5. It will be ground mounted. My
> question is about the radials. I am going to bury them so I don't have
> to take them up each time I mow. I am going to just lift up the sod
> and bury them about 3 inches or so. What I need to know is will it
> work to put each radial for the different bands in the same trench, or
> do I need to space them out from each other so they are not touching?
> I am thinking that I would need to keep them separated, but I'm not
> sure. Also, would radials for just 80m, 20m, and 10m work fine, or do
> I need to run ones for 40m and 15m also? I know idealy I would want a
> set for each band, but how much better would that be over what I would
> get for using the radials for just those 3 bands? Most of my operating
> is on 20m and 10m anyway. Thanks in advance for all your help.
>
> Lee Ratcliff
> KC4ART
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2644. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <nN7IOfSa+AHXTNwabZCcXaJGKg4N@4ax.com>
Source record: 180191

yu131537@yorku.ca (stan miles) wrote:

Try http://www.web-radio.com/

or links at the Real Audio site. Enter "internet radio" in the search
engines. Just look around...

Bob
k5qwg

>Hi
>
>Perhaps my first message was not clear about this, I would like to
>learn the names of as many shock jocks as I can. In Canada we do not
>have shock jocks, I'd like to listen to one over the Internet.
>
>Thanks for your help!
>
>Stan
>
>Bob Miller <bamiller@texas.net> wrote:
>
>>yu131537@yorku.ca (stan miles) wrote:
>
>>>RanHefner <ranhefner@my-deja.com> wrote:
>>>
>>>>Why do you want to know, Stan?
>>>
>>>I'd like to see their websites.
>
>>Why don't you enter their "disk jockey" names into a search engine?
>>Those are the names their web sites would be under.
>
>>Howard Stearns and Don Imus, by the way, are their real names, I
>>believe.
>
>>Don is on WFAN. You might do a search for that web site.
>
>>Best...
>
>

2645. Re: INFO: Combining Triband Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39C8CC84.359B771D@GTE.net>
Source record: 180192

Dan Bryden wrote:

> Gentlemen: Has anyone tried adding additional elements to a standard
> commercial triband yagi (Cushcraft A3S) I have an old Th3jr and thought
> there might be an advantage to adding a couple of directors to the A3S.
> The th3jr elements are light weight and would not require too much in
> the way of boom reinforcement. Could get 3dB or so. Any comments ?
> Thanks Dan WA6PXO

3dB is a LOT- if you could get it. Ehrenspeck and Poehler et al have shown
that to increase a yagis gain by 3dB requires a boom length increase of
almost 2X- and this is for single band optimized yagis.
Dale W4OP

2646. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E1BC.F9CC1E09@mindspring.com>
Source record: 180193

>
>
> This thread is closed.
>
> NC

It doesn't look as though anyone agrees with you. Try typing it louder. Maybe if you threaten someone the thread will close...

2647. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E206.F2F2BB9F@mindspring.com>
Source record: 180194

>
>
> This thread is closed.
>
> NC

This is like the third time you have closed this thread. You don't seem to be doing a very good job of it.

2648. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E294.9C80FA25@mindspring.com>
Source record: 180195

>
>
> This thread is closed.
>
> NC

Well, here we are at your 4th attempt to close this thread. Just doesn't seem to be working. Maybe if you stomp your feet and threaten to call in the CIA they will close it..

2649. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E2F4.FE3770F8@mindspring.com>
Source record: 180196

```
>
>
> This thread is closed.
>
> NC

Failure number 5..
```

2650. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E315.DC08D049@mindspring.com>
Source record: 180197

>
>
> This thread is closed.
>
> NC

Failure number 6

2651. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E373.8DCA334A@mindspring.com>
Source record: 180198

Fractenna wrote:

> >>From: fractenna@aol.com (Fractenna)
> >
> >>This thread is closed.
> >
> >I understand. :-) However, don't take offense if others choose to continue
> >it;
> >rra.antenna is not a moderated group, so threads are not closed until the
> >participants lose interest in a particular subject.
> >
> >73,
> >Ed Hare, W1RFI
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

Total failure number 7 and I see even more yet to come. This is funny as hell. Chip is having a tantrum....

2652. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E3F3.1106D195@mindspring.com>
Source record: 180199

Fractenna wrote:

> >Ed- Dont worry, Chip does this often. When He feels like being nasty or
> >vulgar, he posts as "Phil". It is not dignified for an assistant prof at
> >a small Boston Metropolitan college to indulge in such, so he uses the
> >"nom-de-crap" of Phil.
> >
> >It is a matter of record that he has used MANY such alter-names, but
> >only "Phil" has had much continuity. In some cases, he has actually
> >carried on cross-postings with himself, apparently to get questions he
> >expected but were not forthcoming.
> >
> >If you dont believe me- ask Tom, Richard, Peter, or any of several other
> >regulars here.
> >
> >Bill-W4BSG
> >
> >"Ed Hare, W1RFI" wrote:
> >>
> >> Fractenna <fractenna@aol.com> wrote:
> >>
> >> > Read the posts you dodo.
> >>
> >> > Why should Dr. Cohen repeat his stuff for lazy people like you?
> >>
> >> > Phil
> >> > de N1ZKT
> >>
> >> I'm confused; who is Phil posting from the Fractenna account? Seems an
> >> entirely different style.
> >>
> >> 73,
> >> Ed Hare, W1RFI
> >
>
> This thread is closed.
>
> NC

Ahhhh..... But I just posted after you said that so I guess it isn't as closed as you think it should be. too bad. And not a damn thing you can do about it.

2653. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E417.601A9699@mindspring.com>
Source record: 180200

```
>
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

Nope..Guess not!
```

2654. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E455.2B4EAF42@mindspring.com>
Source record: 180201

>
> >
> >
>
> This thread is closed.
>
> NC

Try again sucker. This just aint working very well for you is it.....

2655. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E4D5.170CFCDD@mindspring.com>
Source record: 180202

Fractenna wrote:

> >Phil, may I suggest an ...
> >
> >--
> >
> >Fred W4JLE
> >http://w4jle.com/
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000919150016.15866.00003232@ng-md1.aol.com...
> >> >Yeah. What number do you use for the amount of power you're sending to
> >> >the antenna?
> >>
> >> Read the posts you dodo.
> >>
> >> Why should Dr. Cohen repeat his stuff for lazy people like you?
> >>
> >> Phil
> >> de N1ZKT
> >
>
> This thread is closed,
>
> NC

Did Phil or yourself ever take the advise about the autoerotic experience? Or are you dooing that as you "close" this thread?

2656. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E50F.748D829@mindspring.com>
Source record: 180203

>
>
> Thos thread is closed.
>
> NC

nope.... still open..

2657. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C8E6AD.76EC3B19@att.net>
Source record: 180204

Now we know what Phil's job is . . .

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

sideband wrote:

> Might I suggest you hire a publicity agent, NC?

2658. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <qophsssqit57loqfulkcjdh7rg1k4neepl@4ax.com>
Source record: 180205

On or about Wed, 20 Sep 2000 11:24:53 -0500, sideband@mindspring.com,
using the forum rec.radio.amateur.antenna did say:
:>
:> This thread is closed,
:>
:> NC
:
:Did Phil or yourself ever take the advise about the autoerotic experience? Or
:are you dooing that as you "close" this thread?
:
"That's Pretty Thick Headed!"

Have an A&W on Chip/NC/Phil/Fractenna/Nathan Cohen PhD/Cohendog/et al.

::grin::

-SSB

2659. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E593.CFF6B762@mindspring.com>
Source record: 180206

Fractenna wrote:

> >
> >On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
> >using the forum rec.radio.amateur.antenna did say:
> >Except for the typos, He's said this four times...
> >
> >...as if repeating it enough will make it so.
> >
> >Others still have ideas to discuss, NC. Are you now becoming
> >Hitleresque and removing their freedom of speech?
> >
> >Oh, please, do tell.
> >
> >-SSB
> >:
> >:Thos thread is closed.
> >:
> >:NC
> >
>
> This thread is closed.
>
> NC

open open open!

2660. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E578.D146CD67@mindspring.com>
Source record: 180207

>
>
> This thread is closed.
>
> NC

I re-open it. This thread is once again open for business.

2661. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E5FF.537C5332@mindspring.com>
Source record: 180208

>
>
> General comment:
>
> This thread is closed. Go ahead and talk about whatever you want--elsewhere:
> but it has nothing to do with N1IR Open House and this I will continue to
> remind all that this thread is closed.
>
> Start another thread.
>
> NC

NO. I don't want to and there isn't a damn thing you can do about it except
pout.

2662. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <lvphssccjocidubgc4mmht17p1un1tblb4@4ax.com>
Source record: 180209

ROFL!

Good one, George!

Oh, By the by, could you possibly configure your newsreader not to
both email and post? Don't get me wrong, I don't mind you emailing me,
George, if there's something you want to clarify, etc. Thanks.

73's

-SSB

On or about Wed, 20 Sep 2000 16:33:47 GMT, "George, W5YR"
<w5yr@att.net>, using the forum rec.radio.amateur.antenna did say:

:Now we know what Phil's job is . . .
:
:72/73, George W5YR - the Yellow Rose of Texas
:Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
:Amateur Radio W5YR, in the 55th year and it just keeps getting better!
:Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
:
:
:sideband wrote:
:
:> Might I suggest you hire a publicity agent, NC?

2663. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8e7d3.26501109@news.akorn.net>
Source record: 180210

On Wed, 20 Sep 2000 08:29:00 -0400, sideband <sideband@cac.net> wrote:

>Tom:
>
>That's the point. I'm wondering if he's ever had his antennas tested
>at a lab, a calibrated farm, or anything of the sort.

As far as I know he has no outside independent verification.

>Maybe it's naieve of me to think that fractenna will be forthcoming
>with data on his "new exciting technology", blow out the hype, and get
>down and dirty with some real numbers. ::shrug::

That's true.

73 Tom

2664. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E794.B85C1246@mindspring.com>
Source record: 180211

I guess you didn't hear. this thread was closed. You are in violation of the fraktuna thread closing act of 2000. By continuing to post in this thread you openly accept that you may be accused of everything from death threats to child molestation.

"Peter O. Brackett" wrote:

> Thread:
>
> "I wonder" Heh, heh...
>
> Re: BU paper by Cohen and Hohlfield....
>
> I wonder if that BU paper was peer reviewed?
>
> I wonder how many papers in total were submitted to the conference?
>
> I wonder how many were rejected? I wonder how many were accepted?
>
> I wonder who the BU conference organizing committee was headed by?
>
> I wonder who headed the peer review paper selection committee?
>
> I wonder who was the technical program committee chairman?
>
> I wonder who put out the "call for papers". I wonder who selected the
> papers chosen for presentation.
>
> I wonder how many really knoledgeable antenna folks actually attended that
> conference and spent the time to do a conscientious review of the papers.
>
> I wonder...
>
> Peter
>
> --
> Peter O. Brackett
> Morrisville, NC
> --
> Fractenna <fractenna@aol.com> wrote in message
> news:20000919081308.06614.00000259@ng-cc1.aol.com...
> > >>From: fractenna@aol.com (Fractenna)
> > >
> > >>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
> > >>my Sb220 and 10M FQY is flawed.

> > >
> > >I may have missed it, Chip; did you post the methods you used to
> calculate
> > >the
> > >EIRP in the first place? I am especially curious about the gain of the
> > >antenna
> > >and by what generally accepted method it was derived (NEC model,
> calibrated
> > >antenna range, etc.) I think from there, the competent folks here can
> > >quickly
> > >tell you if your calculations are flawed, if you need such reassurance,
> that
> > >is. :-)
> > >
> > >73,
> > >Ed Hare, W1RFI
> > >
> >
> >
> > Nope; I don't need any pats on the head OR back; but go take a look at the
> > elevation power pattern comparison to a dipole (Fig 3) .
> >
> > http://www.fractenna.com/ham/hampage1.html
> >
> > I am a bit amused that HAMS assume I am the village idiot. Some anyway.
> >
> > EIRP= power to antenna times peak field strength (call it directivity if
> you
> > wish, some herehave been using the term wrong abd calling GAIN the same as
> > DIRECTIVITY).
> >
> > If you wish to see how the EIRP figures into galactic SETI and the best
> way to
> > establish a link, , then I will send you a preprint in a few weeks to
> W1RFI,
> > if requested.
> >
> > The paper was given at a conference at Boston University and described
> at:
> >
> > http://www.spaceviews.com/2000/09/article3b.html
> >
> > The paper is by Cohen and Hohlfeld and is:
> >
> > "Mutual Figure of Merit In an Interstellar Intelligent Communications
> Link"
> >
> > The important results from said paper is that : 1) the link will be at
> > microwave; 2) small dishes on receive (such as done by Seti League folks)
> are a

> > waste of time;
> > 3) the transmitter aperture, if doubling as a power collector (i.e. an
> aperture
> > engine) has a 4th power of the diameter dependence in the MFOM.
> >
> > Basically this shows that ad hoc descriptions of using the microwave
> window,
> > andthe ad hoc assumption of using large dishes are formally and globally
> > correct--without any biases on modality; solid angle covered; or
> wavelength to
> > be used.
> >
> > Isn't EIRP wonderful?
> >
> > Sure hope someone can show I am using it right:-)!
> >
> > Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to you
for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I
refuse to use a
spell checker and don't take criticism well.

2665. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E7CE.F874C7A@mindspring.com>
Source record: 180212

>
>
> This thread is closed.
>
> NC

Donn't you ever get tired of being wrong?

2666. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E81F.8FF56741@mindspring.com>
Source record: 180213

```
>
> >:
> >:This thread is closed.
> >:
> >:NC
> >
> >In other words, NC is saying "Yes, you're right. The implications you
> >have raised are correct. Regardless, I am above you, and I'm not going
> >to answer any more of your questions, as you are not worthy of my
> >twisted and ill founded logic."
> >
> >::chuckle::
> >
> >-SSB
> >
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC
```

As if to verify sideband's statement.

2667. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E85D.B60C7A5D@mindspring.com>
Source record: 180214

Fractenna wrote:

> >Here we go again..
> >
> >Kindof infantile.
> >
> >Just my two cents.
> >
> >-SSB
> >
> >On or about 20 Sep 2000 09:05:28 GMT, fractenna@aol.com (Fractenna),
> >using the forum rec.radio.amateur.antenna did say:
> >
> >:>
> >:>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
> >:>using the forum rec.radio.amateur.antenna did say:
> >:>Except for the typos, He's said this four times...
> >:>
> >:>...as if repeating it enough will make it so.
> >:>
> >:>Others still have ideas to discuss, NC. Are you now becoming
> >:>Hitleresque and removing their freedom of speech?
> >:>
> >:>Oh, please, do tell.
> >:>
> >:>-SSB
> >:>:
> >:>:Thos thread is closed.
> >:>:
> >:>:NC
> >:>
> >:
> >:
> >:This thread is closed.
> >:
> >:NC
> >
> >
>
> This thread is closed.
>
> NC

WOW For closing this thread you have caused more than double of the normal traffic in it. good job!

2668. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E8BD.CD79DCB3@mindspring.com>
Source record: 180215

```
>
> >:>:>:
> >:>:>:Thos thread is closed.
> >:>:>:
> >:>:>:NC
> >:>:>
> >:>:
> >:>:
> >:>:This thread is closed.
> >:>:
> >:>:NC
> >:>
> >:>
> >:
> >:This thread is closed.
> >:
> >:NC
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC
```

Does this have anything to do with your having a small penis?

2669. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39C8E939.DDF358B2@mindspring.com>
Source record: 180216

```
>
> >:>:>:>:Thos thread is closed.
> >:>:>:>:
> >:>:>:>:NC
> >:>:>:>
> >:>:>:
> >:>:>:
> >:>:>:This thread is closed.
> >:>:>:
> >:>:>:NC
> >:>:>
> >:>:>
> >:>:
> >:>:This thread is closed.
> >:>:
> >:>:NC
> >:>
> >:>
> >:>
> >:>
> >:>
> >:>
> >:>
> >:>
> >:
> >:This thread is closed.
> >:
> >:NC
> >
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

Yes. This definitely looks like a penis issue.
```

2670. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8e9c4.26998707@news.akorn.net>
Source record: 180217

On Wed, 20 Sep 2000 06:52:04 -0400, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>I wonder
>I wonder...
>
> Peter

Del Shannon would be proud of you Peter.

I suspect no one was at the N1IR open house, except the people who
normally use the fractenna keyboard.

I have heard any else say they were there, have you?

I think Chip wants this thread closed so he can call the FBI. He want
to close this thread, and open the X files.

73 Tom

2671. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8eb44.27382084@news.akorn.net>
Source record: 180218

On 20 Sep 2000 12:36:04 GMT, k1bqt@aol.com (K1BQT) wrote:

>Sorry. You don't get to "close threads" and you don't get to say who can
>comment and who may not.
>
>Rick K1BQT

Dis tred ith clothed.

2672. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920041837.01374.00000270@ng-fc1.aol.com>
Source record: 180219

>>Door. close. bridge. burn. Liason. History.
>
>Hmmm, a big difference in the dish-out vs take tolerance, eh? :-)
>
>73,
>Ed Hare, W1RFI
>

Hardly.

I have, in the past, received over 600 e-mails a week. I must separate the wheat from the chaff. I no longer answer ham fractal antenna requests, but direct them to the fractal antenna reflector.

Some, like yourself, initially appear reasonable in approach and then reveal an inappropriate core.

There are lots of other people you can talk to; I suggest you talk withh them.

Cordially, NC.

2673. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042059.01374.00000271@ng-fc1.aol.com>
Source record: 180220

>
>On or about 19 Sep 2000 18:51:16 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:Look at the ham page
>:
>:http://www.fractenna.com/ham/hampage1.html
>
>I did
>:
>:and be a goody dooby and tell us what is wrong or misleading or just plain
>:inaccurate about the performance the relative advantages or anything else.
>:Go ahead and do everyone a favor and tell them what is wrong.
>
>He compares apples to oranges. Comparing a dipole with no
>reflector/director to a yagi fractal antenna is like comparing a bb
>pistol to an AR-15; They're kindof the same thing, but not really
>
>:From what I've seen of other ham antenna web pages this is perhaps the best
>:documented antenna from a performnace and modeling standpoint on the web.
>
>Not really. Like has yet to be compared with like.
>
>:Dr. Cohen should be getting major kudos for helping hams out. Not stupid
>:idiotic crap like this from a few jerks.
>:
>:Phil
>:de N1ZKT
>
>Chip might have something with the particular arrangements of these
>fractals, however, he has yet to provide comparative data that
>actually means something.
>
>Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
>meter FQY, or a single element fractal dipole with a standard dipole,
>or a single element 1/4 wave fractal vertical with a single element
>1/4 wave standard vertical antenna. Then we'd have some meaningful
>comparisons to judge from.
>
>Just my two cents.
>
>-SSB
>
>

This is a typical uninformed, ham operator response.

Both model and measurement data are on that ham page. If you do not understand how to use it, then don't blame someone else.

But as you have no name anyway, what are we to suggest to you?

NC

2674. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042641.01374.00000272@ng-fc1.aol.com>
Source record: 180221

>The performance of the fractal quad appears to be just about what I would
>expect from a 2-element gain antenna that size. The "fractal" approach
>appears
>to do a nice job of relatively low-loss linear loading of the elements.

Stop right there. You have no idea what a fractal is, and what linear loading
is, if you say this.

Please do not try to engage me in conversation. I do not believe that you have
a sufficient knowledge base to publicly inform others on this, and based on
your previous, inappropriate behavior, you do not deserve any further
attentuion from me.

A linear loaded antenn cannot do what this antenna does.,

Period.

>Perhaps
>you should consider posting the model,
No. I have given over 780 copies of the model out since 1996.

The last thing I am going to do is post a 200 wire model as a file on this NG.

so all of us lazy people can avoid
>typing it in. The model would not offer any info that is different than that
>which is in the dimension table and perhaps some will feel more comfortable
>with the results you cite if they can play with it a bit themselves. I see
>no
>reason to believe that the antenna does not work as advertised, although I
>will
>defer to those who know more about the modeling than I do to pass judgement.
>
>While I agree with:
>
>>After some internal debate I decided the >best way to make it easy for
>others
>to >build the parasitic reflector was to make a >copy of the driven element
>and
>then use >a stub or two turn coil lower the resonant >frequency.
>
>I wonder whether it may be just as easy to stipulate two wooden blocks and
>make
>the entire reflector just a tiny bit larger than the DE? Might be easier for
>some builders. Just a suggestion; the solution you used in the design is
>entirely valid and useful.
>

>>I used 2 ferrite beads to choke the coax >at the feed, but the antenna IS
>balanced. >Note that I choke all antennas, balanced >or not.
>
>I agree with the need for the feed-line choke; the antenna is balanced, but
>the
>feed line is not. While I normally don't see a need for a balun on an antenna
>like a dipole, without a balun at the antenna, feed -line radiation and
>pickup
>would degrade the pattern and front-to-back ratio a bit. Good engineering
>choice, IMHO.
>
>> Slight changes in SWR suggest that > there is some minor loss caused by the
>> PVC; I would say about 1/2 dB
>> approximately.
>
>Actually, I would be surprised if the small amount of PVC used in the design
>on
>your page contributed that much loss. If it were lossy, the effect would be
>to
>broaden the SWR curve -- the SWR at the band edges would be a bit better than
>it would be without loss. In actuality, your measurements show a better SWR
>at
>the band center and a slightly poorer SWR at the band edges, indicating that
>the losses are LESS than the model predicted. Could be minor differences in
>the actual loss of the aluminum wire.
>

>BTW, in another post I mentioned that comparing an antenna over ground to dBd
>was not correct. That is NOT intended to apply to the information on your
>page, because your statement that the quad exhibits about 3 dBd gain is
>correct; the exact gain in dBd can be obtained from the info in your free
>space
>pattern and the comparison of an antenna over ground to a similarly polarized
>dipole over ground at the same height, while technically not dBd, generally
>does give a dBd gain number close to dBd.
>
>Just some off the cuff observations, not intended to be comprehsive or
>definitive.
>
>73,
>Ed Hare, W1RFI
>

NC

2675. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042829.01374.00000275@ng-fc1.aol.com>
Source record: 180222

>Phil, may I suggest an autoerotic experience...
>
>--
>
>Fred W4JLE
>http://w4jle.com/
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000919150016.15866.00003232@ng-md1.aol.com...
>> >Yeah. What number do you use for the amount of power you're sending to
>> >the antenna?
>>
>> Read the posts you dodo.
>>
>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>>
>> Phil
>> de N1ZKT
>

This thread is closed,

NC

2676. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042805.01374.00000274@ng-fc1.aol.com>
Source record: 180223

```
>
> 19 Sep 2000 19:00:16 GMT dans l'article
> <20000919150016.15866.00003232@ng-md1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:Read the posts you dodo.
>:
>:Why should Dr. Cohen repeat his stuff for lazy people like you?
>:
>
>Phil,
>
>You have some work to do instead of spending your time on usenet.
>The fractal "Hitometer" on fractenna's web page is crazy.
>The number is actually about 10 cohen-dB too high.
>
>--
>Gilbert.
>
>
>
>
>
>
>

This thread is closed.

NC
```

2677. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042736.01374.00000273@ng-fc1.aol.com>
Source record: 180224

>Ed- Dont worry, Chip does this often. When He feels like being nasty or
>vulgar, he posts as "Phil". It is not dignified for an assistant prof at
>a small Boston Metropolitan college to indulge in such, so he uses the
>"nom-de-crap" of Phil.
>
>It is a matter of record that he has used MANY such alter-names, but
>only "Phil" has had much continuity. In some cases, he has actually
>carried on cross-postings with himself, apparently to get questions he
>expected but were not forthcoming.
>
>If you dont believe me- ask Tom, Richard, Peter, or any of several other
>regulars here.
>
>Bill-W4BSG
>
>"Ed Hare, W1RFI" wrote:
>>
>> Fractenna <fractenna@aol.com> wrote:
>>
>> > Read the posts you dodo.
>>
>> > Why should Dr. Cohen repeat his stuff for lazy people like you?
>>
>> > Phil
>> > de N1ZKT
>>
>> I'm confused; who is Phil posting from the Fractenna account? Seems an
>> entirely different style.
>>
>> 73,
>> Ed Hare, W1RFI
>

This thread is closed.

NC

2678. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042849.01374.00000276@ng-fc1.aol.com>
Source record: 180225

>
>Now, THAT was good-
>(I wish I had thought of that particular, short, pungent reply.)
>Bill
>
>W4JLE wrote:
>>
>> Phil, may I suggest an autoerotic experience...
>>
>> --
>>
>> Fred W4JLE
>> http://w4jle.com/
>>
>> "Fractenna" <fractenna@aol.com> wrote in message
>> news:20000919150016.15866.00003232@ng-md1.aol.com...
>> > >Yeah. What number do you use for the amount of power you're sending to
>> > >the antenna?
>> >
>> > Read the posts you dodo.
>> >
>> > Why should Dr. Cohen repeat his stuff for lazy people like you?
>> >
>> > Phil
>> > de N1ZKT
>
>
>
>
>
>

This thread is closed.

NC

2679. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920043026.01374.00000278@ng-fc1.aol.com>
Source record: 180226

>
>
>Fractenna wrote:
>> Actually Jim, this is a problem you have. I really don't have time to
>> accommodate your personal requests, ESPECIALLY since anyone who reads the
>posts
>> will already have the info.
>
>Really. I believe W1RFI was the first to ask for it. How do you find
>it believable that people are responding to posts they don't read?
>Also, please consider the fact that it takes no more time to answer a
>question than it does to make insulting and condescending remarks to
>them.
>
>73, Jim AC6XG
>

This thread is closed.

NC

2680. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920042957.01374.00000277@ng-fc1.aol.com>
Source record: 180227

>
>>Subject: Re: N1IR OPEN HOUSE
>>From: Jim Kelley jwkelley@uci.edu
>>Date: Tue, Sep 19, 2000 4:25 PM
>>Message-id: <39C7E7D6.3A0CC94A@uci.edu>
>>
>>Fractenna wrote:
>>>
>>> >Yeah. What number do you use for the amount of power you're sending
>>to
>>> >the antenna?
>>
>>> Read the posts you dodo.
>>
>>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>>
>>> Phil
>>> de N1ZKT
>>
>>Who is this adolescent Phil person that is speaking to me? Your
>>behaviour, sir, is uncalled for. I'll thank you not to address me in
>>that fashion. Now go home and wash your mouth out, and don't presume to
>>speak for the Great Dr. Cohen.
>>
>>:-)
>
>It is just an alter ego of Chip. He signs that name when he wants
>to be more obnoxious than normal.
>I sure would not let anyone make a post like that from my keyboard.
>
>Why answer a simple question, when you can write a half a dozen more
>posts saying why you don't have time to answer the question.
>
>Logic there somewhere, maybe not.
>
>AL
>
>

This thread is closed.

NC

2681. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920043052.01374.00000279@ng-fc1.aol.com>
Source record: 180228

>
>Funy thing....
>
>Until Phil showed back up, I was starting to actually think there was
>some small merit to Chip's particular antennae. Now, I'm not so sure.
>
>
>::shrug::
>
>Talk about shooting yourself in the foot.
>
>-SSB
>
>On or about 19 Sep 2000 23:25:29 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>
>:>Fractenna wrote:
>:>>
>:>> >Yeah. What number do you use for the amount of power you're sending to
>:>> >the antenna?
>:>
>:>> Read the posts you dodo.
>:>
>:>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>:>
>:>> Phil
>:>> de N1ZKT
>:>
>:>Who is this adolescent Phil person that is speaking to me? Your
>:>behaviour, sir, is uncalled for. I'll thank you not to address me in
>:>that fashion. Now go home and wash your mouth out, and don't presume to
>:>speak for the Great Dr. Cohen.
>:>
>:>:-)
>:>
>:>(For anyone still awake, this bruhaha arises out of the fact that the
>:>aforementioned fellow claims, inaccurately, to have published the EIRP
>:>for his station, not only here on the newsgroup, but implies that it can
>:>be found on his web page.)
>:>
>:>Infinite Best Regards (+10 dB.....or is it 20), AC6XG
>:
>:
>:Actually Jim, this is a problem you have. I really don't have time to

>:accommodate your personal requests, ESPECIALLY since anyone who reads the
>posts
>:will already have the info.
>:
>:Best I can tell, the objective is to tie me into some annoying infinite time
>:sink with malcontents.
>:
>:Nope. Forget that.
>:
>:
>: So, if you want to be annoying, try someone else. I'm sure Phil will annoy
>you
>:right back if he thinks it would help.
>:
>:73
>:Chip N1IR
>
>
>
>
>
>
>

This thread is closed.

NC

2682. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920043200.01374.00000280@ng-fc1.aol.com>
Source record: 180229

>
>>From: fractenna@aol.com (Fractenna)
>
>>When someone calls 666-1541 they have access to many, many people.
>
>Perhaps so, but they do not have access to anyone from ARRL at that number.
>:-)
>
>>f your curiosity is merely idle, then why :1) burden me with it; 2) ask a
>>question which I have answered at least 4 previous times, and is this
>>readily
>>accessible on archives; 3) feel compelled to ask it in a public and global
>>medium?
>
>>Who cares? Why should they?
>
>NC, I have been around the block a few times too many. When one answers an
>idle
>question with all of those answers, I have little doubt that I really don't
>want to know the answer. Please don't mind if I pass on the archive search...
>
>>Dear W1RFI@arrl.net--whoever that is at the moment;
>
>Actually, W1RFI@arrl.net or W1RFI@aol.com will almost always be me; you can
>tell from the sig line. You can call me "Ed" no matter what account I post
>from, "Dear W1RFI@..." seems a bit awkward.
>
>73,
>Ed Hare, W1RFI
>

This thread is closed.

NC

2683. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <ajtgss4rs92v80mc035804eo3vaungphlg@4ax.com>
Source record: 180230

On or about 20 Sep 2000 08:20:59 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:>Chip might have something with the particular arrangements of these
:>fractals, however, he has yet to provide comparative data that
:>actually means something.
:>
:>Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
:>meter FQY, or a single element fractal dipole with a standard dipole,
:>or a single element 1/4 wave fractal vertical with a single element
:>1/4 wave standard vertical antenna. Then we'd have some meaningful
:>comparisons to judge from.
:>
:>Just my two cents.
:>
:>-SSB
:>
:>
:
:This is a typical uninformed, ham operator response.
:
:Both model and measurement data are on that ham page. If you do not understand
:how to use it, then don't blame someone else.
:
:But as you have no name anyway, what are we to suggest to you?
:
:NC

Well, there's where you're wrong, Chip... I'm not a HAM operator, I'm
a CB operator. I've made no effort to conceal that fact. I am
uninformed, about alot of things, and while you continue to withold
that information which would "inform" me, I will remain so.

I've asked, repeatedly, for performance data on like antennas. You
have not been forthcoming with this information, and, therefore, are
the cause of my being uninformed. Since you caused this situation,
either quit whining about it, or remedy it.

Let's have some comparison data betwen a FQY and a standard Yagi. What
are you afraid of, here? I'm sure most understand that an antenna with
a reduced form factor will necessarily perform less well than a full
sized antenna. I'm interested in knowing HOW MUCH less.

Comparing the FQY to a dipole shows some nice numbers, for sure, and
they have meaning when deciding between the FQY and an omnidirectional
antenna. But those numbers are meaningless when comparing the FQY to a

full sized directional antenna. I'm sure one could extrapolate a rudimentary comparison by comparing the numbers from the FQY:dipole and, say, a Moonraker:dipole comparisons, but those numbers will be removed from true readings, and not show the true benefits/caveats of the FQY vs a moonraker, or some other full sized directional antenna.

What are you afraid of, Chip? That your beloved Fractenna design won't prove useful vs a full sized antenna? That's not the point of my questions. As I stated before, most operators understand that a reduced form factor antenna won't perform as well as a full sized antenna. I'm interested in how much less, if at all, the FQY would perform vs. a full sized antenna, with real data on an actual comparison.

Well? What's it going to be?

-SSB

2684. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <b0vgssobl90s70m51n91iotm7htc6vmjlg@4ax.com>
Source record: 180231

On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
Except for the typos, He's said this four times...

...as if repeating it enough will make it so.

Others still have ideas to discuss, NC. Are you now becoming
Hitleresque and removing their freedom of speech?

Oh, please, do tell.

-SSB
:
:Thos thread is closed.
:
:NC

2685. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <v6vgssgkhgsik1mhjj2gqlu94a42tp3pr8@4ax.com>
Source record: 180232

Make that more than four... Apparently aol's news servers are being
slow in forwarding all the posts, or slurp is being slow in receiving
them. At any rate. repetiton doth not induce truth.

-SSB

On or about Wed, 20 Sep 2000 04:59:29 -0400, sideband
<sideband@cac.net>, using the forum rec.radio.amateur.antenna did say:

:
:
:On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
:using the forum rec.radio.amateur.antenna did say:
:Except for the typos, He's said this four times...
:
:...as if repeating it enough will make it so.
:
:Others still have ideas to discuss, NC. Are you now becoming
:Hitleresque and removing their freedom of speech?
:
:Oh, please, do tell.
:
:-SSB
::
::Thos thread is closed.
::
::NC

2686. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920050528.22365.00000114@ng-fc1.aol.com>
Source record: 180233

```
>
>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>Except for the typos, He's said this four times...
>
>...as if repeating it enough will make it so.
>
>Others still have ideas to discuss, NC. Are you now becoming
>Hitleresque and removing their freedom of speech?
>
>Oh, please, do tell.
>
>-SSB
>:
>:Thos thread is closed.
>:
>:NC
>

This thread is closed.

NC
```

2687. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920050447.22365.00000113@ng-fc1.aol.com>
Source record: 180234

Well Steve,

You have me thoroughly confused.

From what I have seen of the two antennas you described, here is my summary. Kindly correct me if I am wrong.

1)You are confusing directivity with gain as your models do not distinguish between directivity and gain. Gain is the directivity times the effiicency(expressed on a 0 to 1 normalized scale), then converted into dBi --for example. [NOTE: the directivity and gain of MI2 at it's lowest resonance are very similar; they are within about 1/4 dB.]

2) You mention a spiral design--which looks like you fit into a 1/8 by 1/8 wave form factor, but now is only 5 inches in size on 20M... You ascribe this antenna with a directivity that is the same as the MI2--and a higher radiation resistance;note that radiation resistance is the non-ohmic real impedance at the current max...

3) You talk about an "arbitrarily chosen" random design which you claim has basically equivalent directivity and BW to MI2.

Let me comment on the 3 points.

On (1), I do not know if your models are capable, or include, all components of ohmic loss. IMHO, you should run directivity CORRECTLY and include all components of ohmic loss Then you will actually have a directivity.

On (2), you further call this "helically wound". Now I am VERY confused. Is this a 3rd antenna?? Are you referring to a flat spiral, or is it something else? Surely you do not expect a 3-D COIL to fit into a 2-D form factor...

The flat spiral so described will have a very low radiation resistance and a very low directivity. It is very, very electrically small.

On (3),I suggest that you do, indeed, publish your random design--as any small antenna --the MI2 a prime example-- with 1.9 dBi **directivity** and high efficiency is valuable. I do, however, have grave doubts that you have such a design, based on your confusion between directivity and gain.

I would like to give you an opportunity to recant your statement that you have an "arbitrarily chosen random design". This is surely wrong. This says that one may choose any other random design and attain the same result.

Is there yet another antenna: ''a "helically wound loop"? Did I miss this? I hope you understand that this is not a 2 D form factor, and cannot meet the rules of the fractal antenna challenge.

73
Chip N1IR

2688. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920050556.22365.00000115@ng-fc1.aol.com>
Source record: 180235

>Make that more than four... Apparently aol's news servers are being
>slow in forwarding all the posts, or slurp is being slow in receiving
>them. At any rate. repetiton doth not induce truth.
>
>-SSB
>
>On or about Wed, 20 Sep 2000 04:59:29 -0400, sideband
><sideband@cac.net>, using the forum rec.radio.amateur.antenna did say:
>
>:
>:
>:On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
>:using the forum rec.radio.amateur.antenna did say:
>:Except for the typos, He's said this four times...
>:
>:...as if repeating it enough will make it so.
>:
>:Others still have ideas to discuss, NC. Are you now becoming
>:Hitleresque and removing their freedom of speech?
>:
>:Oh, please, do tell.
>:
>:-SSB
>::
>::Thos thread is closed.
>::
>::NC
>

This thread is closed.

NC

2689. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <gjvgssou2g0bjc953g6053g6glu6r56sl6@4ax.com>
Source record: 180236

Here we go again..

Kindof infantile.

Just my two cents.

-SSB

On or about 20 Sep 2000 09:05:28 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>
:>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
:>using the forum rec.radio.amateur.antenna did say:
:>Except for the typos, He's said this four times...
:>
:>...as if repeating it enough will make it so.
:>
:>Others still have ideas to discuss, NC. Are you now becoming
:>Hitleresque and removing their freedom of speech?
:>
:>Oh, please, do tell.
:>
:>-SSB
:>:
:>:Thos thread is closed.
:>:
:>:NC
:>
:
:
:This thread is closed.
:
:NC

2690. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920051001.22365.00000116@ng-fc1.aol.com>
Source record: 180237

>
>On or about 20 Sep 2000 08:20:59 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:>Chip might have something with the particular arrangements of these
>:>fractals, however, he has yet to provide comparative data that
>:>actually means something.
>:>
>:>Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
>:>meter FQY, or a single element fractal dipole with a standard dipole,
>:>or a single element 1/4 wave fractal vertical with a single element
>:>1/4 wave standard vertical antenna. Then we'd have some meaningful
>:>comparisons to judge from.
>:>
>:>Just my two cents.
>:>
>:>-SSB
>:>
>:>
>:
>:This is a typical uninformed, ham operator response.
>:
>:Both model and measurement data are on that ham page. If you do not
>understand
>:how to use it, then don't blame someone else.
>:
>:But as you have no name anyway, what are we to suggest to you?
>:
>:NC
>
>Well, there's where you're wrong, Chip... I'm not a HAM operator, I'm
>a CB operator. I've made no effort to conceal that fact. I am
>uninformed, about alot of things, and while you continue to withold
>that information which would "inform" me, I will remain so.
>
>I've asked, repeatedly, for performance data on like antennas. You
>have not been forthcoming with this information, and, therefore, are
>the cause of my being uninformed. Since you caused this situation,
>either quit whining about it, or remedy it.
>
>Let's have some comparison data betwen a FQY and a standard Yagi. What
>are you afraid of, here? I'm sure most understand that an antenna with
>a reduced form factor will necessarily perform less well than a full
>sized antenna. I'm interested in knowing HOW MUCH less.
>

>Comparing the FQY to a dipole shows some nice numbers, for sure, and
>they have meaning when deciding between the FQY and an omnidirectional
>antenna. But those numbers are meaningless when comparing the FQY to a
>full sized directional antenna. I'm sure one could extrapolate a
>rudimentary comparison by comparing the numbers from the FQY:dipole
>and, say, a Moonraker:dipole comparisons, but those numbers will be
>removed from true readings, and not show the true benefits/caveats of
>the FQY vs a moonraker, or some other full sized directional antenna.
>
>What are you afraid of, Chip? That your beloved Fractenna design won't
>prove useful vs a full sized antenna? That's not the point of my
>questions. As I stated before, most operators understand that a
>reduced form factor antenna won't perform as well as a full sized
>antenna. I'm interested in how much less, if at all, the FQY would
>perform vs. a full sized antenna, with real data on an actual
>comparison.
>
>Well? What's it going to be?
>
>-SSB
>

No one is hiding anything. ACTUAL FQY MEASUREMENTS as COMPARISONS are
presented on that page. I made the ones so described with WK1O **6 years ago**:

http://www.fractenna.com/ham/hampage1.html

Chip N1IR

2691. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920051051.22365.00000117@ng-fc1.aol.com>
Source record: 180238

```
>Here we go again..
>
>Kindof infantile.
>
>Just my two cents.
>
>-SSB
>
>On or about 20 Sep 2000 09:05:28 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>
>:>
>:>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
>:>using the forum rec.radio.amateur.antenna did say:
>:>Except for the typos, He's said this four times...
>:>
>:>...as if repeating it enough will make it so.
>:>
>:>Others still have ideas to discuss, NC. Are you now becoming
>:>Hitleresque and removing their freedom of speech?
>:>
>:>Oh, please, do tell.
>:>
>:>-SSB
>:>:
>:>:Thos thread is closed.
>:>:
>:>:NC
>:>
>:
>:
>:This thread is closed.
>:
>:NC
>
>

This thread is closed.

NC
```

2692. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <qvvgss0tacr47tlvh8tr57rlbug9f8iev7@4ax.com>
Source record: 180239

On or about 20 Sep 2000 09:10:01 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:No one is hiding anything. ACTUAL FQY MEASUREMENTS as COMPARISONS are
:presented on that page. I made the ones so described with WK1O **6 years ago**:
:
:http://www.fractenna.com/ham/hampage1.html
:
:Chip N1IR
:

That's right.. there's a comparison there between a dipole and the
FQY. Nothing comparing the FQY to any other directional antennae.

So where do those numbers hide? The ones comparing the FQY to a
directional antenna, I mean.

-SSB

2693. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <l40hsskn4anreddh3lhmjsaqcuo6vu7o4a@4ax.com>
Source record: 180240

If it's so closed, How come I can keep posting to it?

-SSB

On or about 20 Sep 2000 09:10:51 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:>Here we go again..
:>
:>Kindof infantile.
:>
:>Just my two cents.
:>
:>-SSB
:>
:>On or about 20 Sep 2000 09:05:28 GMT, fractenna@aol.com (Fractenna),
:>using the forum rec.radio.amateur.antenna did say:
:>
:>:>
:>:>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
:>:>using the forum rec.radio.amateur.antenna did say:
:>:>Except for the typos, He's said this four times...
:>:>
:>:>...as if repeating it enough will make it so.
:>:>
:>:>Others still have ideas to discuss, NC. Are you now becoming
:>:>Hitleresque and removing their freedom of speech?
:>:>
:>:>Oh, please, do tell.
:>:>
:>:>-SSB
:>:>:
:>:>:Thos thread is closed.
:>:>:
:>:>:NC
:>:>
:>:
:>:
:>:This thread is closed.
:>:
:>:NC
:>
:>
:
:This thread is closed.

:
:NC

2694. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920052843.25931.00000387@ng-cf1.aol.com>
Source record: 180241

>If it's so closed, How come I can keep posting to it?
>
>-SSB
>
>On or about 20 Sep 2000 09:10:51 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>
>:>Here we go again..
>:>
>:>Kindof infantile.
>:>
>:>Just my two cents.
>:>
>:>-SSB
>:>
>:>On or about 20 Sep 2000 09:05:28 GMT, fractenna@aol.com (Fractenna),
>:>using the forum rec.radio.amateur.antenna did say:
>:>
>:>:>
>:>:>On or about 20 Sep 2000 08:15:32 GMT, fractenna@aol.com (Fractenna),
>:>:>using the forum rec.radio.amateur.antenna did say:
>:>:>Except for the typos, He's said this four times...
>:>:>
>:>:>...as if repeating it enough will make it so.
>:>:>
>:>:>Others still have ideas to discuss, NC. Are you now becoming
>:>:>Hitleresque and removing their freedom of speech?
>:>:>
>:>:>Oh, please, do tell.
>:>:>
>:>:>-SSB
>:>:>:
>:>:>:Thos thread is closed.
>:>:>:
>:>:>:NC
>:>:>
>:>:
>:>:
>:>:This thread is closed.
>:>:
>:>:NC
>:>
>:>
>:

>:This thread is closed.
>:
>:NC
>
>
>
>
>
>
>

This thread is closed.

NC

2695. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920053033.25931.00000388@ng-cf1.aol.com>
Source record: 180242

>
>On or about 20 Sep 2000 09:10:01 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:No one is hiding anything. ACTUAL FQY MEASUREMENTS as COMPARISONS are
>:presented on that page. I made the ones so described with WK1O **6 years
>ago**:
>:
>:http://www.fractenna.com/ham/hampage1.html
>:
>:Chip N1IR
>:
>
>
>That's right.. there's a comparison there between a dipole and the
>FQY. Nothing comparing the FQY to any other directional antennae.
>
>So where do those numbers hide? The ones comparing the FQY to a
>directional antenna, I mean.
>
>-SSB
>

Yes; they were made in comparison to a dipole. This is the convention in antenna measurement, whenever possible. I am sorry you are not aware of that.

Perhaps you may ask such related questions to others in the group.

NC

2696. Crushcraft AV-5 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: kc4art@hotmail.com
Message-ID: <8qa22j$503$1@nnrp1.deja.com>
Source record: 180243

I just aquired a Crushcraft AV-5. It will be ground mounted. My question is about the radials. I am going to bury them so I don't have to take them up each time I mow. I am going to just lift up the sod and bury them about 3 inches or so. What I need to know is will it work to put each radial for the different bands in the same trench, or do I need to space them out from each other so they are not touching? I am thinking that I would need to keep them separated, but I'm not sure. Also, would radials for just 80m, 20m, and 10m work fine, or do I need to run ones for 40m and 15m also? I know idealy I would want a set for each band, but how much better would that be over what I would get for using the radials for just those 3 bands? Most of my operating is on 20m and 10m anyway. Thanks in advance for all your help.

Lee Ratcliff
KC4ART

Sent via Deja.com http://www.deja.com/
Before you buy.

2697. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920055826.24702.00000614@ng-cf1.aol.com>
Source record: 180244

>From: fractenna@aol.com (Fractenna)

>On (1), I do not know if your models are capable, or include, all components
>of ohmic loss. IMHO, you should run directivity CORRECTLY and include
>all components of ohmic loss Then you will actually have a directivity.

Steve, this could certainly answer the questions about the last tenth of a dB or so. Do you have EZNEC? If not, send the model to w1rfi@arrl.org and I will run it on EZNEC to answer the question Chip is raising.

>I would like to give you an opportunity to recant your statement that you
>have an "arbitrarily chosen random design". This is surely wrong.
>This says that one may choose any other random design and attain the
>same result.

I think I can see the confusion; a truly "random" design could be resonant at any random frequency or frequencies, complicating this discussion immensely. Perhaps it could be more accurate to describe his antenna simply as a random design that meets the resonance criteria; certainly there are a lot of easily discovered possible designs that are sufficiently random.

73,
Ed Hare, W1RFI

2698. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920060139.24702.00000615@ng-cf1.aol.com>
Source record: 180245

>From: fractenna@aol.com (Fractenna)

>This thread is closed.

I understand. :-) However, don't take offense if others choose to continue it; rra.antenna is not a moderated group, so threads are not closed until the participants lose interest in a particular subject.

73,
Ed Hare, W1RFI

2699. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <6s2hsss9hn8dsot1bdj3tekmkelar24pp1@4ax.com>
Source record: 180246

On or about 20 Sep 2000 09:30:33 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:Yes; they were made in comparison to a dipole. This is the convention in
:antenna measurement, whenever possible. I am sorry you are not aware of that.

I was aware it was a convention to compare antennas to a dipole. I was
asking a different question, for different data.

:Perhaps you may ask such related questions to others in the group.
:
:NC
:

Hrm... apparently you haven't been reading what I've been writing, and
your posts in response to what I've written are concocted specifically
to cause me distress. Not that they are effective; they are not.

You wonder why it is a few here on this newsgroup are critical of you?
Perhaps this is the reason why. It seems that you hold yourself above
those in this newsgroup, and therefore, refuse to answer specific
questions. Or perhaps it is because you don't have the answers
yourself?

Might I suggest you hire a publicity agent, NC? You're not going to
sell many antennas without providing some modicum of information about
them. Perhaps a publicity agent or a PR person might be more
forthcoming with data about the antennae you plan to market, inticing
more people to purchase, or at least buy in to the idea they may be
benificial.

Just a suggestion.

-SSB

2700. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <nc3hss8kg6t1pjfp7205h4u0lhq5d1bsoc@4ax.com>
Source record: 180247

Hrm... More wasted bandwidth..

Kindof idiot savant behavior, isn't it?

-SSB

On or about 20 Sep 2000 09:28:43 GMT, and at other previous times,
fractenna@aol.com (Fractenna), using the forum
rec.radio.amateur.antenna did say:
:>:>:>:
:>:>:>:Thos thread is closed.
:>:>:>:
:>:>:>:NC
:>:>:>
:>:>:
:>:>:
:>:>:This thread is closed.
:>:>:
:>:>:NC
:>:>
:>:>
:>:
:>:This thread is closed.
:>:
:>:NC
:>
:>
:>
:>
:>
:>
:>
:
:This thread is closed.
:
:NC

2701. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <lh3hssk8s9nvr3hkfuom2ds23629shjems@4ax.com>
Source record: 180248

Hear Hear!

-SSB

On or about 20 Sep 2000 10:01:39 GMT, w1rfi@aol.com (W1RFI), using the
forum rec.radio.amateur.antenna did say:

:>From: fractenna@aol.com (Fractenna)
:
:>This thread is closed.
:
:I understand. :-) However, don't take offense if others choose to continue it;
:rra.antenna is not a moderated group, so threads are not closed until the
:participants lose interest in a particular subject.
:
:73,
:Ed Hare, W1RFI

2702. Re: HF link coupled feed question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qa483$cp1$1@slb7.atl.mindspring.net>
Source record: 180249

Helps, keep the spiders from being electrocuted!

Seriously, it doesn't really matter, the "ground" is not needed for the tuner to work properly. Your whole system is actually designed to be and should be physically symmetric or balanced with respect to ground and thus does not need to work "against" ground.

In fact if the "ground" connected to the "rotor" is not done properly, which is really quite a difficult practical matter, it will tend to upset your setup.

I would just run without it, but take care that you don't get an rf burn or shock while adjusting the capacitor, use an insulated shaft and keep your hand and fingers well away from the body of the capacitor as you tune the cap.

Peter K1PO

--
Peter O. Brackett
Morrisville, NC
--
Bob <xyz_p15218@flash.net> wrote in message
news:%yQx5.2032$864.87790@news.flash.net...
> Link coupled HF antenna tuners drawings usually show a split variable
> capacitor in parallel with the "secondary" coil feeding the feeders. The
> rotor of the capacitor is shown grounded in many schematics. I have tried
my
> system both ways...with the rotor grounded and floating. It seems to make
no
> difference and only a miniscule difference in the SWR. The antenna is a 40
> meter dipole fed with twin lead and used on 40, 30 and 20 with the same
link
> circuit, using different taps on the coil. Anyone know for what purpose
the
> rotor might be grounded??
> Thanks
> KB8TL
> Bob
>
>
> remove the XYZ_ to reply
>
>

2703. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qa590brl1@nntp9.atl.mindspring.net>
Source record: 180250

Thread:

"I wonder" Heh, heh...

Re: BU paper by Cohen and Hohlfield....

I wonder if that BU paper was peer reviewed?

I wonder how many papers in total were submitted to the conference?

I wonder how many were rejected? I wonder how many were accepted?

I wonder who the BU conference organizing committee was headed by?

I wonder who headed the peer review paper selection committee?

I wonder who was the technical program committee chairman?

I wonder who put out the "call for papers". I wonder who selected the
papers chosen for presentation.

I wonder how many really knoledgeable antenna folks actually attended that
conference and spent the time to do a conscientious review of the papers.

I wonder...

Peter

--
Peter O. Brackett
Morrisville, NC
--
Fractenna <fractenna@aol.com> wrote in message
news:20000919081308.06614.00000259@ng-cc1.aol.com...
> >>From: fractenna@aol.com (Fractenna)
> >
> >>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
> >>my Sb220 and 10M FQY is flawed.
> >
> >I may have missed it, Chip; did you post the methods you used to
calculate
> >the
> >EIRP in the first place? I am especially curious about the gain of the
> >antenna
> >and by what generally accepted method it was derived (NEC model,
calibrated
> >antenna range, etc.) I think from there, the competent folks here can
> >quickly

> >tell you if your calculations are flawed, if you need such reassurance,
that
> >is. :-)
> >
> >73,
> >Ed Hare, W1RFI
> >
>
>
> Nope; I don't need any pats on the head OR back; but go take a look at the
> elevation power pattern comparison to a dipole (Fig 3) .
>
> http://www.fractenna.com/ham/hampage1.html
>
> I am a bit amused that HAMS assume I am the village idiot. Some anyway.
>
> EIRP= power to antenna times peak field strength (call it directivity if
you
> wish, some herehave been using the term wrong abd calling GAIN the same as
> DIRECTIVITY).
>
> If you wish to see how the EIRP figures into galactic SETI and the best
way to
> establish a link, , then I will send you a preprint in a few weeks to
W1RFI,
> if requested.
>
> The paper was given at a conference at Boston University and described
at:
>
> http://www.spaceviews.com/2000/09/article3b.html
>
> The paper is by Cohen and Hohlfeld and is:
>
> "Mutual Figure of Merit In an Interstellar Intelligent Communications
Link"
>
> The important results from said paper is that : 1) the link will be at
> microwave; 2) small dishes on receive (such as done by Seti League folks)
are a
> waste of time;
> 3) the transmitter aperture, if doubling as a power collector (i.e. an
aperture
> engine) has a 4th power of the diameter dependence in the MFOM.
>
> Basically this shows that ad hoc descriptions of using the microwave
window,
> andthe ad hoc assumption of using large dishes are formally and globally
> correct--without any biases on modality; solid angle covered; or
wavelength to

> be used.
>
> Isn't EIRP wonderful?
>
> Sure hope someone can show I am using it right:-)!
>
> Chip N1IR

2704. Mobile use of AT50 w/TS50

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: radiofreq0@aol.com
Message-ID: <20000920070248.12529.00000001@ng-md1.aol.com>
Source record: 180251

Any of you using an AT50 with a TS50 in a mobile setup? How are you configuring it and with what type antenna?
Can I put my AT50 in the trunk? Is it a waist to use a 20 mtr hamstick for multiband ops?
Aside from using a screwdriver, what can I do with the AT50 in my mobile? Or is it really for base/portable ops?
tnx,
Jeff

2705. Re: Stupid question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Adam <jabbaSPAMJAM@w3.to>
Message-ID: <39c89b0d@grissom>
Source record: 180252

I use a loop antenna here that has about 90 metres of wire in it, and a 9m length of 300 ohm tv ladder line. It is resonant on 160 and 80 without a tuner, if I shorten it by around 3m with alligator clips it will work on 15m and do 10 through a tuner (All checked throught the MFJ antenna analyser). So I don't see why it couldn't work, but I thought 1/4 verticals were in the order of 35 ohms anyway...

Adam VK4LAJ
The Loaded Dog
http://www.spamjam.loaded-dog.com - remove the spam jam

"Juha" <oh3nx.nopespam.@sral.fi> wrote in message
news:8FB389FFDjoenonenonecom@192.89.123.233...
>
> Pardon me, but I got a stupid idea.
>
> If we have a G5RV multiband dipole and the matching to a 50 ohm
> output transmitter coax is handled with a specific length of 300-450 ohm
> ladder line, can we apply the same matching approach to a vertical
antenna?
>
> Then we would have half of the "G5RV" standing up, the other half being
> represented by ground radials, and fed like G5RV, and voila, we would have
> a multiband vertical.
>
> I would simulate this with EZNEC but I have only the trial version. Maybe
I
> wouldn't need even EZNEC to find out why it wouldn't work if I was smart
> enough, but I'm not.
>
> Any ideas?
>
> Regards
> Juha
> OH3NX

2706. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Ff1y5.710$u95.2277829@news.ntplx.net>
Source record: 180253

sideband <sideband@cac.net> wrote:

>>This thread is closed.

>I understand. :-) However, don't take offense if others choose to continue
it;
>rra.antenna is not a moderated group, so threads are not closed until the
>participants lose interest in a particular subject.

> Hear Hear!

Actually, if Chip's intent really was to end the thread, the muliple posts he did are more than likely to have the opposite effect, from what I have seen of the "style" some of the other rraa denizens use to discourse with Chip. I fear that some will see this as the tossing of the gauntlet. It wouldn't be at all surprising to see some start changing the names of other threads, for example.

Frankly, I had hoped that rec.radio.amateur.antenna would have less of this sort of goings on than rec.radio.amateur.policy, but apparently most newsgroups and discussion boards end up at this point sooner rather than later.

73,
Ed Hare, W1RFI

2707. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073321.07838.00000001@ng-da1.aol.com>
Source record: 180254

>
>>From: fractenna@aol.com (Fractenna)
>
>>On (1), I do not know if your models are capable, or include, all components
>>of ohmic loss. IMHO, you should run directivity CORRECTLY and include
>>all components of ohmic loss Then you will actually have a directivity.
>
>Steve, this could certainly answer the questions about the last tenth of a dB
>or so. Do you have EZNEC? If not, send the model to w1rfi@arrl.org and I
>will
>run it on EZNEC to answer the question Chip is raising.
>
>>I would like to give you an opportunity to recant your statement that you
>>have an "arbitrarily chosen random design". This is surely wrong.
>>This says that one may choose any other random design and attain the
>>same result.
>
>I think I can see the confusion; a truly "random" design could be resonant at
>any random frequency or frequencies, complicating this discussion immensely.
>Perhaps it could be more accurate to describe his antenna simply as a random
>design that meets the resonance criteria; certainly there are a lot of easily
>discovered possible designs that are sufficiently random.
>
>73,
>Ed Hare, W1RFI
>
>

My comments were not directed to you sir; furthermore I have asked you to stop
communicating with me.

My statement was clear. IF such a random loop exists, it, by definition of
'arbitrary', cannot be arbitrary in how it was chosen.
If this were so, then it would be just as likely that its attribute would be
shared by many, if not all, others.

NC

2708. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073348.07838.00000002@ng-da1.aol.com>
Source record: 180255

```
>>From: fractenna@aol.com (Fractenna)
>
>>This thread is closed.
>
>I understand. :-) However, don't take offense if others choose to continue
>it;
>rra.antenna is not a moderated group, so threads are not closed until the
>participants lose interest in a particular subject.
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>

This thread is closed.

NC
```

2709. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073618.07838.00000003@ng-da1.aol.com>
Source record: 180256

>On or about 20 Sep 2000 09:30:33 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:Yes; they were made in comparison to a dipole. This is the convention in
>:antenna measurement, whenever possible. I am sorry you are not aware of
>that.
>
>I was aware it was a convention to compare antennas to a dipole. I was
>asking a different question, for different data.
>
>:Perhaps you may ask such related questions to others in the group.
>:
>:NC
>:
>
>Hrm... apparently you haven't been reading what I've been writing, and
>your posts in response to what I've written are concocted specifically
>to cause me distress. Not that they are effective; they are not.
>
>You wonder why it is a few here on this newsgroup are critical of you?
>Perhaps this is the reason why. It seems that you hold yourself above
>those in this newsgroup, and therefore, refuse to answer specific
>questions. Or perhaps it is because you don't have the answers
>yourself?
>
>Might I suggest you hire a publicity agent, NC? You're not going to
>sell many antennas without providing some modicum of information about
>them. Perhaps a publicity agent or a PR person might be more
>forthcoming with data about the antennae you plan to market, inticing
>more people to purchase, or at least buy in to the idea they may be
>benificial.
>
>Just a suggestion.
>
>-SSB
>

Just an abswer:

It is the convention to compare ANY and ALL antenna being so tested with a
dipole.

Do you understand that if you compare a ERSATZ yagi to a dipole and a YUMYUM
whngboomer to a dipole, that the ERSATZ and the WHANGboomer are thus
comparable?

As I said, you need to ask questions rather than assume incorrect knowldge.

NC

2710. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073644.07838.00000004@ng-da1.aol.com>
Source record: 180257

>
>Hrm... More wasted bandwidth..
>
>Kindof idiot savant behavior, isn't it?
>
>-SSB
>
>On or about 20 Sep 2000 09:28:43 GMT, and at other previous times,
>fractenna@aol.com (Fractenna), using the forum
>rec.radio.amateur.antenna did say:
>:>:>:>:
>:>:>:>:Thos thread is closed.
>:>:>:>:
>:>:>:>:NC
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>:>:>:
>:>:>:This thread is closed.
>:>:>:
>:>:>:NC
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>:>:This thread is closed.
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>:
>:This thread is closed.
>:
>:NC
>
>
>
>
>
>
>

This thread is closed.

NC

2711. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073748.07838.00000005@ng-da1.aol.com>
Source record: 180258

>
>Thread:
>
>"I wonder" Heh, heh...
>
>Re: BU paper by Cohen and Hohlfield....
>
>I wonder if that BU paper was peer reviewed?
>
>I wonder how many papers in total were submitted to the conference?
>
>I wonder how many were rejected? I wonder how many were accepted?
>
>I wonder who the BU conference organizing committee was headed by?
>
>I wonder who headed the peer review paper selection committee?
>
>I wonder who was the technical program committee chairman?
>
>I wonder who put out the "call for papers". I wonder who selected the
>papers chosen for presentation.
>
>I wonder how many really knoledgeable antenna folks actually attended that
>conference and spent the time to do a conscientious review of the papers.
>
>I wonder...
>
> Peter
>
>--
>Peter O. Brackett
>Morrisville, NC
>--
>Fractenna <fractenna@aol.com> wrote in message
>news:20000919081308.06614.00000259@ng-cc1.aol.com...
>> >>From: fractenna@aol.com (Fractenna)
>> >
>> >>So, no troll: show me how my estimate of EIRP from N1IR on 10M with
>> >>my Sb220 and 10M FQY is flawed.
>> >
>> >I may have missed it, Chip; did you post the methods you used to
>calculate
>> >the
>> >EIRP in the first place? I am especially curious about the gain of the

>> >antenna
>> >and by what generally accepted method it was derived (NEC model,
>calibrated
>> >antenna range, etc.) I think from there, the competent folks here can
>> >quickly
>> >tell you if your calculations are flawed, if you need such reassurance,
>that
>> >is. :-)
>> >
>> >73,
>> >Ed Hare, W1RFI
>> >
>>
>>
>> Nope; I don't need any pats on the head OR back; but go take a look at the
>> elevation power pattern comparison to a dipole (Fig 3) .
>>
>> http://www.fractenna.com/ham/hampage1.html
>>
>> I am a bit amused that HAMS assume I am the village idiot. Some anyway.
>>
>> EIRP= power to antenna times peak field strength (call it directivity if
>you
>> wish, some herehave been using the term wrong abd calling GAIN the same as
>> DIRECTIVITY).
>>
>> If you wish to see how the EIRP figures into galactic SETI and the best
>way to
>> establish a link, , then I will send you a preprint in a few weeks to
>W1RFI,
>> if requested.
>>
>> The paper was given at a conference at Boston University and described
>at:
>>
>> http://www.spaceviews.com/2000/09/article3b.html
>>
>> The paper is by Cohen and Hohlfeld and is:
>>
>> "Mutual Figure of Merit In an Interstellar Intelligent Communications
>Link"
>>
>> The important results from said paper is that : 1) the link will be at
>> microwave; 2) small dishes on receive (such as done by Seti League folks)
>are a
>> waste of time;
>> 3) the transmitter aperture, if doubling as a power collector (i.e. an
>aperture
>> engine) has a 4th power of the diameter dependence in the MFOM.
>>

>> Basically this shows that ad hoc descriptions of using the microwave
>window,
>> andthe ad hoc assumption of using large dishes are formally and globally
>> correct--without any biases on modality; solid angle covered; or
>wavelength to
>> be used.
>>
>> Isn't EIRP wonderful?
>>
>> Sure hope someone can show I am using it right:-)!
>>
>> Chip N1IR
>
>
>
>
>
>
>
>

This thread is closed.

NC

2712. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920073929.07838.00000006@ng-da1.aol.com>
Source record: 180259

```
>
>Hear Hear!
>
>-SSB
>
>On or about 20 Sep 2000 10:01:39 GMT, w1rfi@aol.com (W1RFI), using the
>forum rec.radio.amateur.antenna did say:
>
>:>From: fractenna@aol.com (Fractenna)
>:
>:>This thread is closed.
>:
>:I understand. :-) However, don't take offense if others choose to continue
>it;
>:rra.antenna is not a moderated group, so threads are not closed until the
>:participants lose interest in a particular subject.
>:
>:73,
>:Ed Hare, W1RFI
>
>
>
>
>
>
>

This thread is closed.

NC
```

2713. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920074011.07838.00000007@ng-da1.aol.com>
Source record: 180260

>
>sideband <sideband@cac.net> wrote:
>
>>>This thread is closed.
>
>>I understand. :-) However, don't take offense if others choose to continue
>it;
>>rra.antenna is not a moderated group, so threads are not closed until the
>>participants lose interest in a particular subject.
>
>> Hear Hear!
>
>Actually, if Chip's intent really was to end the thread, the muliple posts
>he did are more than likely to have the opposite effect, from what I have
>seen of the "style" some of the other rraa denizens use to discourse with
>Chip. I fear that some will see this as the tossing of the gauntlet. It
>wouldn't be at all surprising to see some start changing the names of other
>threads, for example.
>
>Frankly, I had hoped that rec.radio.amateur.antenna would have less of this
>sort of goings on than rec.radio.amateur.policy, but apparently most
>newsgroups and discussion boards end up at this point sooner rather than
>later.
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>
>
>
>

This thread is closed.

NC

2714. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Rm1y5.712$u95.2277844@news.ntplx.net>
Source record: 180261

sideband <sideband@cac.net> wrote:

> Others still have ideas to discuss, NC. Are you now becoming
> Hitleresque and removing their freedom of speech?

> Oh, please, do tell.

I can think of a number of possiblities. He may be having a newsreader problem, although I have never heard of the AOL newsreader repeatedly re-posting the same response. He may have realized that the points that everyone raised are really correct and he wishes to cede them and move on. He may really be trying to end this particular discussion, however I fear that his approach will have just the opposite effect. Perhaps if he had kindly pointed out that the thread has mutated a bit and that it is time for a subject change, the rest of us would probably agree that doing so is appropriate usenet netiquette and do so. Repeatedly declaring threads "closed" on an unmoderated newsgroup is not considered good netiquette, in most circles.

Either way, it is moot; we are free to continue to discuss the points being raised, with or without anyone's consent. I will continue to partipate to the extent that the discourse remains civil.

73,
Ed Hare, W1RFI

2715. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920074524.07873.00000002@ng-da1.aol.com>
Source record: 180262

>sideband <sideband@cac.net> wrote:
>
>> Others still have ideas to discuss, NC. Are you now becoming
>> Hitleresque and removing their freedom of speech?
>
>> Oh, please, do tell.
>
>I can think of a number of possiblities. He may be having a newsreader
>problem, although I have never heard of the AOL newsreader repeatedly
>re-posting the same response. He may have realized that the points that
>everyone raised are really correct and he wishes to cede them and move on.
>He may really be trying to end this particular discussion, however I fear
>that his approach will have just the opposite effect. Perhaps if he had
>kindly pointed out that the thread has mutated a bit and that it is time for
>a subject change, the rest of us would probably agree that doing so is
>appropriate usenet netiquette and do so. Repeatedly declaring threads
>"closed" on an unmoderated newsgroup is not considered good netiquette, in
>most circles.
>
>Either way, it is moot; we are free to continue to discuss the points being
>raised, with or without anyone's consent. I will continue to partipate to
>the extent that the discourse remains civil.
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>
>
>
>

General comment:

This thread is closed. Go ahead and talk about whatever you want--elsewhere:
but it has nothing to do with N1IR Open House and this I will continue to
remind all that this thread is closed.

Start another thread.

NC

2716. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8a065.8212929@news.akorn.net>
Source record: 180263

Hi Richard,

On Tue, 19 Sep 2000 21:38:35 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>According to Terman in his 4th edition of "Electronic and Radio
>Engineering", page 871, the gain as a power ratio (not db) of a
>nonresonant wire 2 wavelengths long is 6.5 when compared with an
>isotropic radiator. (a power ratio of 4 is 6 db and a power ratio of 8
>is 9 db)
>
>If this wire of 2 wavelengths is brought close to the ground it will
>experience loss imposed by the soil`s imperfections. The soil is neither
>a good conductor nor a good insulator. The severity of the loss depends
>on the exact soil composition and how near the wire is placed to the
>soil. The soil will eat away at the gain and directivity of the wire.

Amen.

To the tune of many many dB. If ground losses didn't "eat away at the
gain" a great amount, the Beverage wouldn't work at all. It is the
large amount of loss in the earth that allows the Beverage to work. At
a height of .05 WL or less the wire would become a virtual
transmission line over perfect ground, with the vertical ends the
major source of radiation.

We certainly can't compare a long wire a large fraction of a
wavelength above earth to a Beverage .05 WL or less above earth!

Even at a height 1/3 of its length, longwires experience so much
current loss along their length due to coupling to lossy earth below
the antenna and losses in the wire that gain reaches values lossless
theory predicts. Actual measurements show longwires limit gain at a
length between 3.3 and 4 wavelengths when installed at a height 1/3 of
their length above earth.

>Some Beverage antennas will retain some gain when close to the ground.
>Some will not. It is simply a matter of whether the difference between
>the antenna gain and the ground loss is a positive number.

It's well established by hundreds of users Beverages suffer huge
losses compared to antennas like properly installed verticals.

Modeling programs agree totally with the results people see.

Just like the TV antenna book about 1/4 wl folded dipoles making good
antennas, the War Departmnent book is wrong

73 Tom

2717. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8a55e.9485510@news.akorn.net>
Source record: 180264

On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:

>That's right.. there's a comparison there between a dipole and the
>FQY. Nothing comparing the FQY to any other directional antennae.
>
>So where do those numbers hide? The ones comparing the FQY to a
>directional antenna, I mean.
>
>-SSB

Careful sideband, Chip uses the worse comparison standards imaginable.

If you read his tests carefully, you'll see they are all but
meaningless.

First, he is on a large rock ledge overlooking a major highway. From
his house, you can see Boston and the Atlantic ocean.

There are fences behind him, and large structures. His site is
cluttered except for a clear shot across to Europe and Africa.

It would be virtually impossible to tell how anything works in an
environment like that, especially with his habitually sloppy
measurement methods.

73 Tom

2718. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c8a795.10052860@news.akorn.net>
Source record: 180265

On Wed, 20 Sep 2000 06:13:34 -0400, sideband <sideband@cac.net> wrote:

>Hrm... More wasted bandwidth..
>
>Kind of idiot savant behavior, isn't it?

Disclaimer:

I'd like to remind everyone that NC, Chip, N1IR, Nathan Cohen PHd,
Phil, Hy, Beth, Fractenna, Jaypole, Cohendog, and the other names
posting from that AOL account are not representative of normal
behavior for people in this country or any country in the world. They
do not represent the typical person with a higher degree, the typical
amateur radio operator, or even the typical "homeless person"
wandering the streets since Regan cut funding for mental care
facilities.

73 Tom

2719. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920082013.08407.00000013@ng-cc1.aol.com>
Source record: 180266

>
>On Wed, 20 Sep 2000 06:13:34 -0400, sideband <sideband@cac.net> wrote:
>
>>Hrm... More wasted bandwidth..
>>
>>Kind of idiot savant behavior, isn't it?
>
>Disclaimer:
>
>I'd like to remind everyone that NC, Chip, N1IR, Nathan Cohen PHd,
>Phil, Hy, Beth, Fractenna, Jaypole, Cohendog, and the other names
>posting from that AOL account are not representative of normal
>behavior for people in this country or any country in the world. They
>do not represent the typical person with a higher degree, the typical
>amateur radio operator, or even the typical "homeless person"
>wandering the streets since Regan cut funding for mental care
>facilities.
>
>73 Tom
>
>
>
>
>
>

This thread is closed.

NC

2720. Re: Crushcraft AV-5 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: Mogens <petsen@lazy.dk>
Message-ID: <8qaa8f$k8a$1@news.inet.tele.dk>
Source record: 180267

Basically your radials are detuned by the earth, so talking about resonant radials is not the idea. And therefore the question of having different radials in the same trench make no sense. If the antenna was in the air the answer would properly be to separate them.

Radials for a ground mounted vertical are : Many and as long as possible.
The ultimative solution is 120 radials with the length of 1/4 wavelength, but "smaller" will also work.
This is done to overcome the (typical) bad conductivity of the soil around the antenna, and thereby minimise the ground loss. Gives a better efficiency instead of loosing your power.

If you were going to have say only 4 radials on a ground mount vertical you will experience something like an expensive dummy load. :-)

Mogens (oz1akn)

2721. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <s6bhssomguotsv78d19gaag00h83hnmhqt@4ax.com>
Source record: 180268

Tom:

That's the point. I'm wondering if he's ever had his antennas tested
at a lab, a calibrated farm, or anything of the sort. I've asked
before, and gotten no answers, so I figured maybe this was a way to
get that data.

Maybe it's naieve of me to think that fractenna will be forthcoming
with data on his "new exciting technology", blow out the hype, and get
down and dirty with some real numbers. ::shrug::

-SSB

On or about Wed, 20 Sep 2000 09:22:57 GMT, 2w8ji@contesting.com (Tom
W8JI), using the forum rec.radio.amateur.antenna did say:

:On Wed, 20 Sep 2000 05:16:16 -0400, sideband <sideband@cac.net> wrote:
:
:>That's right.. there's a comparison there between a dipole and the
:>FQY. Nothing comparing the FQY to any other directional antennae.
:>
:>So where do those numbers hide? The ones comparing the FQY to a
:>directional antenna, I mean.
:>
:>-SSB
:
:Careful sideband, Chip uses the worse comparison standards imaginable.
:
:If you read his tests carefully, you'll see they are all but
:meaningless.
:
:First, he is on a large rock ledge overlooking a major highway. From
:his house, you can see Boston and the Atlantic ocean.
:
:There are fences behind him, and large structures. His site is
:cluttered except for a clear shot across to Europe and Africa.
:
:It would be virtually impossible to tell how anything works in an
:environment like that, especially with his habitually sloppy
:measurement methods.
:
:73 Tom

2722. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <i8pgsskbct5c4tqkafj2fmdhgjsv2kid4f@4ax.com>
Source record: 180367

Ed:

I apoloise, first of all, for clipping all of your post. It was too long, in my estimation, to keep reposting, and adding my comments.

The reason I suggested comparing a Moonraker 4 to a FQY is this: I'd like to see what the comparison is between yagi and yagi, dipole and dipole, and vertical and vertical. Comparing the gain of a yagi in a particular direction against an omnidirectional dipole (which, by the definition of most, transmits equally poorly in all directions) doesn't seem fair. The field strength of the yagi in the direction its pointed is going to be stronger than an omnidirectional antenna.

This is what I meant by apples to apples, and oranges to oranges. I was interested in the losses, if any, incurred by using a Fractal design on the same band/frequency as the same type of non-fractal antenna. Thus the comparison between yagi's, dipoles, and verticals.

I apologise if my post was misleading in this respect. I hope this clears it up.

-SSB

2723. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000920041532.01374.00000269@ng-fc1.aol.com>
Source record: 180368

>In article <0YSx5.705$u95.2248226@news.ntplx.net>,
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>> <klocko@toad.net> wrote:
>>
>> > Actually, EIRP is the power at the antenna times the gain of the
>antenna
>> > referenced to an isotrope. If you prefer dB's, it's dBm + dBi.
>>
>> Just as a few points of clarification, it would be equally valid for
>any
>> other expression of power, such as dBW, etc.
>
>No argument. I wanted to keep it simple.
>
>It is also the power fed
>to the
>> antenna terminals, not the power of the transmitter, unless you also
>factor
>> in feed line loss.
>
>I did say "at the antenna."
>
>> Also, that dBi reference is for the gain of the antenna in situ; ie,
>over
>> ground, with any other attenuations factored (loss through buildings,
>etc.)
>
>If you mean the gain in the presence of the building or ground as
>reflected in the pattern, I agree. Are you saying a loss through a
>building should be factored into the gain or factored out? If it's an
>absorption loss due to material (brick, wood, etc), I think I'd keep
>that a separate term.
>
>> As a last point of reference, over "average" ground, a half-wave
>dipole up a
>> half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
>is a
>> gain of about 5.2 dBd.
>
>Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
>between dBi and dBd values. One other point. Sometimes the ERP (the
>power at the antenna times the gain of the antenna referenced to a
>half-wave dipole) is needed. The value of gain used in the
>calculation might then need to adjusted by that nasty little 2.15 dB

>term.
>
>>So a half-wave dipole over real ground really
>does
>> have a gain of 5.2 dB compared to a half-wave dipole. :-) This is, of
>> course, because the term dBd is a half-wave dipole in free space. This
>> causes no end of confusion when some compare an antenna gain to a
>dipole at
>> the same height and call the result dBd. The terms dBi and dBd really
>are
>> mathemetical constructs.
>
>Well, there's got to be some number that antenna manufacturers can crow
>about in their ads. 73,
>Bill N3WK
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

Thos thread is closed.

NC

2724. Re: Shock Jock list/web site?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:03:32 UTC
From: yu131537@yorku.ca
Message-ID: <8q8ukn$1vc$2@sunburst.ccs.yorku.ca>
Source record: 180352

RanHefner <ranhefner@my-deja.com> wrote:

>Why do you want to know, Stan?

I'd like to see their websites.

Please help me - thus far I did not get any info...

Thanks

s

>In article <8q7qrv$9m2$4@sunburst.ccs.yorku.ca>,
> yu131537@yorku.ca wrote:
>> Hello Everyone
>>
>> May I please ask for your help. I am sorry to be a little off topic,
>> but the other newsgroups devoted to radio seem to be a lot less
>> popular then this group.
>>
>> Could you please tell me the names of shock jocks like Howard Stern,
>> Don Imus, Mancow Muller? It would also help if I knew the names of
>> the radio stations they work for. Would you know of
>> websites/newsgroups where I could find this info?
>>
>> Thanks a lot, I would truly appreciate your help!!
>>
>> Stan
>>
>>

>--
>Randy A. Hefner
>http://talk.to/frs
>http://go.to/qx3
>http://come.to/funnynews

>Sent via Deja.com http://www.deja.com/
>Before you buy.

2725. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:08:47 UTC
From: fractenna@aol.com
Message-ID: <20000919200847.21296.00000028@ng-fy1.aol.com>
Source record: 180350

>
>Fractenna <fractenna@aol.com> wrote:
>
>> >I'm confused; who is Phil posting from the Fractenna account? Seems an
>> >entirely different style.
>
>> Then do your research and discover for yourself.
>
>It was only idle curiosity, Chip; if you have a reason to want to keep it a
>secret, I really don't mind.
>
>> Or is the ARRL particularly interested in the screenname of
>fractenna@aol.com
>> for some reason?
>
>> What reason?
>
>It was only idle curiosity, Chip (I assume NC is Chip, but if there are
>multiple users sharing the same AOL screen name, please accept my apology.)
>Why would you think that my question could represent an organizational
>interest by ARRL? The normal usenet convention is that people do not post
>the views of their employers; their participation is personal. There is no
>reason that does not apply here, Chip, and to help make that point, I
>deliberately do not include ARRL in the Organization: line or in my sig.
>The fact that this post does originate from arrl.org is probably found in
>some of the headers, but I make no bones about that either way.
>
>It would be no more correct for you to assume that ARRL has an interest in
>the screenname fractrenna@aol.com than it would be for people to assume that
>Fractenna feels it has somthing to hide by your not answering my question.
>
>I must say that your reaction to my question was a bit unexpected. If this
>is a sore point with you, I will not trouble you with it again.
>
>73,
>Ed Hare, W1RFI

Dear W1RFI@arrl.net--whoever that is at the moment;

When someone calls 666-1541 they have access to many, many people.

When someone CALLS from 66-1541 it could one one of many,many people.

Same with a screenname.

If your curiosity is merely idle, then why :1) burden me with it; 2) ask a question which I have answered at least 4 previous times, and is this readily accessible on archives; 3) feel compelled to ask it in a public and global medium?

Who cares? Why should they?

NC

2726. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 00:12:04 UTC
From: arrow146@aol.com
Message-ID: <20000919201204.08446.00000144@ng-ff1.aol.com>
Source record: 180351

>Subject: Re: N1IR OPEN HOUSE
>From: Jim Kelley jwkelley@uci.edu
>Date: Tue, Sep 19, 2000 4:25 PM
>Message-id: <39C7E7D6.3A0CC94A@uci.edu>
>
>Fractenna wrote:
>>
>> >Yeah. What number do you use for the amount of power you're sending
>to
>> >the antenna?
>
>> Read the posts you dodo.
>
>> Why should Dr. Cohen repeat his stuff for lazy people like you?
>
>> Phil
>> de N1ZKT
>
>Who is this adolescent Phil person that is speaking to me? Your
>behaviour, sir, is uncalled for. I'll thank you not to address me in
>that fashion. Now go home and wash your mouth out, and don't presume to
>speak for the Great Dr. Cohen.
>
>:-)

It is just an alter ego of Chip. He signs that name when he wants
to be more obnoxious than normal.
I sure would not let anyone make a post like that from my keyboard.

Why answer a simple question, when you can write a half a dozen more
posts saying why you don't have time to answer the question.

Logic there somewhere, maybe not.

AL

2727. Re: HF link coupled feed question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 01:01:32 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C80C2F.18B6C0D9@att.net>
Source record: 180353

In a perfectly balanced system - the tuner, feedline, antenna, the rest of the world, etc. - the rotor "assumes" a zero potential. Actually connecting it to whatever you consider to be "ground" makes that true within that limited universe.

To the extent that all that other stuff really is balanced or nearly so, then grounding the rotor would probably produce the effect you experienced: little or none.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Bob wrote:
>
> Link coupled HF antenna tuners drawings usually show a split variable
> capacitor in parallel with the "secondary" coil feeding the feeders. The
> rotor of the capacitor is shown grounded in many schematics. I have tried my
> system both ways...with the rotor grounded and floating. It seems to make no
> difference and only a miniscule difference in the SWR. The antenna is a 40
> meter dipole fed with twin lead and used on 40, 30 and 20 with the same link
> circuit, using different taps on the coil. Anyone know for what purpose the
> rotor might be grounded??
> Thanks
> KB8TL
> Bob

2728. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 01:42:10 UTC
From: w1rfi@aol.com
Message-ID: <20000919214210.06995.00000156@ng-cd1.aol.com>
Source record: 180354

>From: fractenna@aol.com (Fractenna)

>When someone calls 666-1541 they have access to many, many people.

Perhaps so, but they do not have access to anyone from ARRL at that number. :-)

>f your curiosity is merely idle, then why :1) burden me with it; 2) ask a
>question which I have answered at least 4 previous times, and is this
>readily
>accessible on archives; 3) feel compelled to ask it in a public and global
>medium?

>Who cares? Why should they?

NC, I have been around the block a few times too many. When one answers an idle question with all of those answers, I have little doubt that I really don't want to know the answer. Please don't mind if I pass on the archive search...

>Dear W1RFI@arrl.net--whoever that is at the moment;

Actually, W1RFI@arrl.net or W1RFI@aol.com will almost always be me; you can tell from the sig line. You can call me "Ed" no matter what account I post from, "Dear W1RFI@..." seems a bit awkward.

73,
Ed Hare, W1RFI

2729. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 01:44:20 UTC
From: w1rfi@aol.com
Message-ID: <20000919214420.06995.00000159@ng-cd1.aol.com>
Source record: 180355

>From: fractenna@aol.com (Fractenna)

>Door. close. bridge. burn. Liason. History.

Hmmm, a big difference in the dish-out vs take tolerance, eh? :-)

73,
Ed Hare, W1RFI

2730. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 02:17:09 UTC
From: w1rfi@aol.com
Message-ID: <20000919221709.06995.00000173@ng-cd1.aol.com>
Source record: 180356

>fractenna@aol.com (Fractenna) wrote:

>Look at the ham page
:
>http://www.fractenna.com/ham/hampage1.html

>and be a goody dooby and tell us what is wrong or misleading or just plain
>inaccurate about the performance the relative advantages or anything else.

Goody dooby? :-)

>Go ahead and do everyone a favor and tell them what is wrong.

The performance of the fractal quad appears to be just about what I would expect from a 2-element gain antenna that size. The "fractal" approach appears to do a nice job of relatively low-loss linear loading of the elements. Perhaps you should consider posting the model, so all of us lazy people can avoid typing it in. The model would not offer any info that is different than that which is in the dimension table and perhaps some will feel more comfortable with the results you cite if they can play with it a bit themselves. I see no reason to believe that the antenna does not work as advertised, although I will defer to those who know more about the modeling than I do to pass judgement.

While I agree with:

>After some internal debate I decided the >best way to make it easy for others to >build the parasitic reflector was to make a >copy of the driven element and then use >a stub or two turn coil lower the resonant >frequency.

I wonder whether it may be just as easy to stipulate two wooden blocks and make the entire reflector just a tiny bit larger than the DE? Might be easier for some builders. Just a suggestion; the solution you used in the design is entirely valid and useful.

>I used 2 ferrite beads to choke the coax >at the feed, but the antenna IS balanced. >Note that I choke all antennas, balanced >or not.

I agree with the need for the feed-line choke; the antenna is balanced, but the feed line is not. While I normally don't see a need for a balun on an antenna like a dipole, without a balun at the antenna, feed -line radiation and pickup would degrade the pattern and front-to-back ratio a bit. Good engineering choice, IMHO.

> Slight changes in SWR suggest that > there is some minor loss caused by the
> PVC; I would say about 1/2 dB
> approximately.

Actually, I would be surprised if the small amount of PVC used in the design on your page contributed that much loss. If it were lossy, the effect would be to broaden the SWR curve -- the SWR at the band edges would be a bit better than it would be without loss. In actuality, your measurements show a better SWR at the band center and a slightly poorer SWR at the band edges, indicating that the losses are LESS than the model predicted. Could be minor differences in the actual loss of the aluminum wire.

BTW, in another post I mentioned that comparing an antenna over ground to dBd was not correct. That is NOT intended to apply to the information on your page, because your statement that the quad exhibits about 3 dBd gain is correct; the exact gain in dBd can be obtained from the info in your free space pattern and the comparison of an antenna over ground to a similarly polarized dipole over ground at the same height, while technically not dBd, generally does give a dBd gain number close to dBd.

Just some off the cuff observations, not intended to be comprehsive or definitive.

73,
Ed Hare, W1RFI

2731. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 02:30:52 UTC
From: w1rfi@aol.com
Message-ID: <20000919223052.06995.00000175@ng-cd1.aol.com>
Source record: 180357

>From: sideband sideband@cac.net

>Chip might have something with the particular arrangements of these
>fractals, however, he has yet to provide comparative data that
>actually means something.

I saw little in the site that I felt was not possible and reasonable, for an antenna of that size.

The point that seems to be undecided is whether the performance of the antenna is related to the fractal aspects or the linear loading obtained by folding the elements as he has done. Would a non-fractal bending of the wire accomplish pretty much the same thing? Might be fun to run it through AO, to see if AO can improve on the gain by making Monte-Carlo type changes to the dimensions. I have no conclusion about whether there is anything magical about the fractals involved, just musing that this seems to be the main point of contention about the design.

>Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
>meter FQY

That seems like more apples and oranges to me than his comparison to a dipole. Naturally, a physically larger antenna such as the Moonraker would have more gain. His comparison to a dipole in free space does have some validity in antenna engineering circles; dBd is a commonly accepted reference point. Of course, the reference point of dBi is equally universal, and the difference between dBi and dBd is 2.14 dB (or is it closer to 2.13?), both being mathematical constructs. In his using dBd or dBi, you can easily make any such comparison as you suggest.

>or a single element fractal dipole with a standard dipole

That would be a useful comparison if one added a "random" non-fractal antenna of similar overall physical size to the dipole. One can also model a short dipole and see how it compares to a fractal dipole of similar overall maximum dimension. Doesn't seem like it would be very hard for someone to model, if they really were interested. Again, why don't we avoid apples and oranges and compare all of the results in dBi or dBd and avoid the confusion of dBMoonraker or dBfractald. :-)

>Just my two cents.

Now it is up to four cents, unless we are adding up all the posts on the topic, in which case we may have just paid off the national debt. :-)

73,
Ed Hare, W1RFI

2732. Need Info on MOD ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 02:36:45 UTC
From: hjm@totcon.com
Message-ID: <39c8224f.2397390@news.totcon.com>
Source record: 180358

I have a Mosley TA-33 Jr. (10, 15, and 20m) that I would like to cut down the 20m to 17m. Does anyone have the info on how much to remove (cut) off each of the three element ??

Thanks Hj

2733. Re: Help: need 9:1 balun

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 02:54:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39C84333.6A038F22@dvol.com>
Source record: 180361

CAM wrote:

> Brian Kelly wrote:
> > ... are you saying that any decent 1:1 balun/choke can transform
> > the balanced feedline with an R(x) + j(y) impedance into an unbalanced
> > feedline with an R(x) + j(y) feedpoint impedance no matter what? Or what?
>
> Mainly, "Or what?" I avoid the super high SWRs by making my dipoles
> 1/2WL at the lowest frequency of operation.

>
But look out on it's second harmonic freq . .
>
Misunderstanding here I reckon, I predicated my query with some assumed completely random length, not a resonant length dipole. Random to the extent that maybe it's short at it's lowest freq of operation and intentionally isn't resonant on any ham band.
>

> In general, that limits the
> impedances encountered to a donut on the Smith Chart with SWR limits
> between 4.5:1 and 18:1 for 450 ohm line. I then install the 1:1 balun/
> choke at the current maximum point, i.e. zero reactance point.

>
80-10 including the WARC freqs??
>

> Thus, my
> 1:1 balun/choke sees a resistive impedance between 25 ohms and 100 ohms
> and functions accordingly. Conceptually, instead of bringing the balun to
> the antenna, I bring the antenna to the balun.

>
Seems like only under very specific and limited geometry and freq condx. i.e., more of a pain in the ass than a "strategically located" ferrite core balun is worth. The more hype I read about ferrite core baluns being quick trips to r50 + j0 matches . . If it ain't a 5wpm code test for it all it's ferrite core baluns . . never mind!

>
> > The MFJs do have "baluns" and "open-line terminals" you can
> > switch in and which supposedly properly feed balanced lines via their 1:1
> > baluns. What's getting lost in the shuffle/losses if anything??
>
> A lot of the MFJs use 4:1 voltage baluns which don't attempt to balance

> the currents.

>
Bingo; as I thought. That generic breed is/are useless as balanced line tuners
. .
>

> The main function of a T-Line balun is to minimize common-
> mode currents both on the coax side and on the balanced side. A balun
> operated far away from its design parameters will not perform that
> function very well. It's probably fairly uncommon for baluns to experience
> appreciable heat losses. The losses are generally of the nature of
> RF that doesn't make it to the antenna because of current imbalance.
> Some people don't consider unwanted feedline radiation as losses. I do.

>
Certainly. By definition it ain't a dipole if *all* of the RF doesn't ship
in/out out from the flatop. If I wanted a Tee vertical I wouldn't bother with
any feedline, I'd simply endfeed the lone uprunnner with an MFJ random wire
tuner and hope for the best. Never could figger out whether I preferred the
current node or the voltage node in the shack, both have their charms. Back to
real balanced tuners, annoying clunkers that they are. Tnx Cec.
>

>
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

>
w3rv

2734. WTB:NMO Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 02:55:43 UTC
From: radiofreq0@aol.com
Message-ID: <20000919225543.23431.00005010@ng-fi1.aol.com>
Source record: 180359

I need an NMOB mobile mount for a Diamond 50/220/440 mhz mobile antenna.
Email me model, and your best price
j

2735. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 03:04:40 UTC
From: klocko@toad.net
Message-ID: <8q99fu$9mt$1@nnrp1.deja.com>
Source record: 180360

In article <0YSx5.705$u95.2248226@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> <klocko@toad.net> wrote:
>
> > Actually, EIRP is the power at the antenna times the gain of the
antenna
> > referenced to an isotrope. If you prefer dB's, it's dBm + dBi.
>
> Just as a few points of clarification, it would be equally valid for
any
> other expression of power, such as dBW, etc.

No argument. I wanted to keep it simple.

It is also the power fed
to the
> antenna terminals, not the power of the transmitter, unless you also
factor
> in feed line loss.

I did say "at the antenna."

> Also, that dBi reference is for the gain of the antenna in situ; ie,
over
> ground, with any other attenuations factored (loss through buildings,
etc.)

If you mean the gain in the presence of the building or ground as
reflected in the pattern, I agree. Are you saying a loss through a
building should be factored into the gain or factored out? If it's an
absorption loss due to material (brick, wood, etc), I think I'd keep
that a separate term.

> As a last point of reference, over "average" ground, a half-wave
dipole up a
> half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
is a
> gain of about 5.2 dBd.

Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
between dBi and dBd values. One other point. Sometimes the ERP (the
power at the antenna times the gain of the antenna referenced to a
half-wave dipole) is needed. The value of gain used in the
calculation might then need to adjusted by that nasty little 2.15 dB
term.

>So a half-wave dipole over real ground really
does
> have a gain of 5.2 dB compared to a half-wave dipole. :-) This is, of
> course, because the term dBd is a half-wave dipole in free space. This
> causes no end of confusion when some compare an antenna gain to a
dipole at
> the same height and call the result dBd. The terms dBi and dBd really
are
> mathemetical constructs.

Well, there's got to be some number that antenna manufacturers can crow
about in their ads. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2736. Re: Best Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 03:48:07 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C8333A.152843FD@att.net>
Source record: 180362

Couple of comments:

I have the HF9V now and used the HF6V back in the early 80's. Both have been outstanding antennas, not as much from a pure performance standpoint but rather for their combination of reasonable size, rugged construction and multiple resonances at usefull frequencies without lossy and "tender" traps.

Most of the time, the wire antennas here at W5YR will beat the HF9V, but it is worth having in the backyard purely to have a single antenna that will cover - reasonably well - such a broad frequency range. An every now and then, the HF9V will drum up a signal in better shape than any of the others.

And it will likely survive any storm that comes through here so that high winds will not take me off the air. At my age, one doesn't take kindly to tree-climbing!

It is priced probably too high at around $350 these days, but that seems to be the going price for most of the multi-band verticals and Lord knows the HF9V seems to be better constructed and much more rugged than the others. I think that I paid $129 for the HF6V about 1983 or 84.

That said, there are drawbacks and compromises to any antenna. Chief among these for the HF9V is its 3/4 wavelength height on 10 meters. One could not intentionally select a worse antenna length for 10 if there is any interest at all in other than local and nearby stateside contacts. The 1/4 wavelength vertical produces much more useful output at much lower elevation angles, hence is usually to be preferred for DX work.

On the other hand, a ground-mounted 1/4 wave on 10 is not always a world beater. It would have been nice if Butternut could have arranged to have the *top* 1/4 wave section of the HF9V the operational element on 10! <:}

To be honest, I do have to admit that the HF9V does its thing with the aid of 60 ground-mounted radials . . .don't believe any of the propaganda that says radials are not necessary for this antenna configuration.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

> Mogens wrote:
> >

> > The butternut hf6 if you want dx.
> >
> > It's one of the cheapest.
> >
> > No loss due to traps.
> >
> > No earth loss due to missing ground plane or ground wires. (You have to make
> > a proper ground wire system, or when it's in the air a radial system.)
> > Remember that every vertical must HAVE a radial system. Those sold without
> > are expensive dummy loads :-)
> >
> > Almost full antenne lenght on every band giving the highest possible
> > radiation resistance. On 10m its working with the full 29ft/7.9m (equal to
> > 3/4 Wawelenght) On a trap vertical the effective lenght is typical a 1/4
> > wavelenght.
> >
> > Mogens
> >
> > "Sam" <sam_a_34@yahoo.com> wrote in message news:39c238d5$1@news...
> > > What commercial vertical antenna, 10-20 meters do you all recommend and
> > why?

2737. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 03:49:41 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39C8500D.D63E2D27@dvol.com>
Source record: 180365

Reg Edwards wrote:

> Nothing wrong with 16 feet. Can can we ignore a change to 6
> feet plus 2 feet + 2.387 inches at 3.76174 MHz.
>
> But my figures apply at 20.0 degrees centigrade I
> understand much american data is at 25.0 degrees centigrade.
> Fractal reports and investigations don't bother to mention
> ambient temperatures. So it can't matter very much. But we
> must not junk american data just because of this minor
> reporting inconsistency.

>
. . . thus the window opens on the Second Boston Tea Party . .

>
> --
> --
> Regards from Reg, G4FGQ

w3rv

2738. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 03:58:36 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C835B0.1F2F7E5@att.net>
Source record: 180363

Frankly, sideband, I think that the CB world is ready for fractal antennas in a big way. No flames now - I am not deprecating the CB world. But some antenna company is sure missing out on a sure thing. Many successful CB-marketable designs have come from amateur work on the 10-meter band.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

sideband wrote:

> Let's have some data comparing, say, a 10 meter Moonraker 4 with a 10
> meter FQY, or a single element fractal dipole with a standard dipole,
> or a single element 1/4 wave fractal vertical with a single element
> 1/4 wave standard vertical antenna. Then we'd have some meaningful
> comparisons to judge from.
>
> Just my two cents.
>
> -SSB

2739. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile keywords: fractenna,nathan cohen,phil,

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 04:11:28 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39C838B3.E125F4FC@att.net>
Source record: 180364

Ed, the only difference that I see is that he "suffered" you for
considerably longer than most. That speaks well for your stature in the
amateur radio game.
The end result was highly predictable, though, from the first exchange
of postings, however nice and professional they were at the start.

Some people just have trouble dealing with *real* authority figures who
have a demonstrated track record for technical and professional
integrity.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

sideband wrote:
>
> Ed:
>
> Did you really expect anything different?
>
> I sure didn't.
>
> -SSB
>
> On or about 20 Sep 2000 01:44:20 GMT, w1rfi@aol.com (W1RFI), using the
> forum rec.radio.amateur.antenna did say:
>
> :>From: fractenna@aol.com (Fractenna)
> :
> :>Door. close. bridge. burn. Liason. History.
> :
> :Hmmm, a big difference in the dish-out vs take tolerance, eh? :-)
> :
> :73,
> :Ed Hare, W1RFI

2740. Re: Mobile antenna help needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-20 05:48:55 UTC
From: Scott Schultz <n0iu@arrl.net>
Message-ID: <ocYx5.12074$F9.419352@news.corecomm.net>
Source record: 180366

Wayne,

You don't say if its a "normal" Cherokee or Grand Cherokee. I have a
Cherokee Sport and use a gutter mount foldover from Diamond. Of course this
is not possible with the Grand since there are no gutters!

Good Luck!

73,
de Scott N0IU

<wstevenson@acsd.k12.sc.us> wrote in message
news:39c6ce4f.1131973@east.usenetserver.com...
> I want to install a 2/440 rig in my jeep. The problem is the type and
> location of the antenna. The jeep has round bumbers, so a bumper
> mount is out. I would like to use a "through the glass" antenna, but
> have been told they do not work will with tinted windows. I would
> appreciate any suggestions you may have. How the antenna looks on the
> vehicle is something I have to consider, since my wife drives the
> vehicle some.
>
> Thanks for your help!
>
> Wayne N4AHS
>
>

2741. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921190931.25790.00000251@ng-mg1.aol.com>
Source record: 179869

>
><sideband@mindspring.com> wrote:
>
>> This thread is closed.
>
>This NG will simply degenerate into uselessness if every one of us starts
>doing this.
>
>At least put a smiley on it so we can all laugh a bit and move on. :-)
>
>73,
>Ed Hare, W1RFI
>

This thread is about honest, good operatin' great antenna competition!

We should have ALL thought of it sooner!

Now Yuri: I just got CT in the mail. Any pointers?

73
Chip N1IR

2742. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921190955.25790.00000252@ng-mg1.aol.com>
Source record: 179870

>
>
>Fractenna wrote:
>> BTW, THIS THREAD IS CLOSED.
>>
>> NC
>
>Is a closed thread anything like a closed loop? Sure seems like it.
>
>xg
>
>
>
>
>
>
>

This thread is closed.

NC

2743. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CA95F7.BC9DDC88@bellatlantic.net>
Source record: 179871

ANSWER the question: where do you find a complaint
in the questions?

Fractenna wrote:

> >Chip,
> >
> >Where do you find a complaint in the questions?
> >
> >Fractenna wrote:
> >
> >> >What makes you say the antenna "works", and what do you
> >> >mean by "works"?
> >> >
> >> >Have you used a 10 M - or other ham band - fractal antenna?
> >> >
> >> >> Dino
> >> >>
> >> >
> >
> >> Either stop complaining or give something concrete that can be discussed.
> >>
> >> 73
> >> Chip N1IR
> >
> >
>
> Who are you?
>
> NC

2744. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921192013.25790.00000253@ng-mg1.aol.com>
Source record: 179872

>
>Yuri Blanarovich <k3bu@aol.com> wrote:
>
>> I would like to see it compared to other similar handicapped antenna at
>the
>> antenna test range done by any VHF antenna measuring contest/conference.
>> The REAL comparisson vs. scientwisting baloney propaganda.
>
>I would wager that 99% of the antennas that have been published in ARRL
>publications have not been so tested. The claim of 3 dBd gain appears
>reasonable; on what basis would you suggest that anything past NEC-4
>modeling would be required? Like all antenans, the fractal quad has its
>advantages and disadvantages, and, like most antennas, most of those are in
>the eyes of the beholder.
>
>Now, if your really want to see it compared to a similar antenna at one of
>the VHF antenna contests, build a 2M or 6M version and submit it. I am sure
>that this NG, and certainly including Chip, will be interested in the
>results. But I would disagree that such measurments need be made before
>publication in QEX.
>
>Now, I don't know that claims that Chip will make in that article vis a vis
>the fractal design, but even if it were demonstrable that a "random" design
>of similar size could have reasonably equal performance, the design I saw on
>Fractenna's web page offered some mechanical advantages that would make it
>worthwhile. QEX is intended to publish articles that encourage
>experimentation, and the fractal quad certainly qualifies as an
>experimentation opportunity. Maybe the QEX article could contain some of
>that theoretical treatment we have been all hoping to see. To survive the
>peer review that Chip said he would like to see, the article would certainly
>have to have a supportable explanation of how it works.
>
>I look forward to seeing it, Chip. Having been involved in some of these
>discussions, I will offer to Doug that I would like to offer my input.
>
>73,
>Ed Hare, W1RFI

1)I have stated my stipulations. If ARRL wants to act professionally and responsibly on this and not hit an academic with 'this must be an April Fool article' nonsense, why should I care who reads the MS? The point of peer review is when its incorrectly seen as wrong, the authors get to explain and refute: responsibly and cogently.

2) Right now, I get OVER 250 hits a day AVERAGE EACH on the K2 and FQY pages on the ham page of:

http://www.fractenna.com

In comparison, publishing in a ham magazine with very limited circulation only benefits the publisher; certainly not the author. And universities now make major distinctions between peer reviewed and non-peer reviewed articles. So essentially there is no reason for a professional to publish in a ham magazine anymore, unless there is an option of peer review.

Believe me; peer reviewing is no biggie. If done, all that is needed is a statement in the acknowledgement that the article was peer reviewed.

In other words, in the final analysis, one must understand who is doing who a favor.

Don't you think?

Chip N1IR

2745. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921192123.25790.00000254@ng-mg1.aol.com>
Source record: 179873

>If Chip would use the same process to write his article as I use for mine,
>he will send a copy to his "hand picked" peers, who will give Chip feedback
>that will make his article more accurate and useful.

I have done this for 70 articles. Why would i stop now?

NC

2746. Re: Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921192228.24787.00000148@ng-cl1.aol.com>
Source record: 179874

>
>I almost wet my pants reading that one...But seriously that all stems
>from the lack of a suitable diet when a youngster. All Texans are fed
>the right beginning foods at an early age. No strained cabbage, carrots,
>beets for us. Nooooooooooooo....We start off right with this:
>http://web.wt.net/~nm5k/texbfood.jpg
>
>
>MK

Hillarious!
Where is the coax connection to the jar?

Yuri

2747. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921192259.25790.00000256@ng-mg1.aol.com>
Source record: 179875

>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921173847.16176.00000148@ng-cg1.aol.com...
>> This has got to be one of the most interesting antennae I have ever heard
>of!
>>
>> 73
>> Chip N1IR
>
>Now I know why they call you a troll. I guess I really pushed the wrong
>button presenting the non-fractal design (not the one Chip mentions here)
>that meets the MI2 Loop performance.
>
>Steve

I realized that you were putting us all on Steve, and thought I'd go along with
your joke.

It WAS funny! Not much antenna humor around:-)

73
Chip N1IR

2748. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921192639.24787.00000149@ng-cl1.aol.com>
Source record: 179876

```
>
>> DO NOT RESPOND TO TROLLS!
>============================
>This begs the question "How does one recognise a troll ?"
>
>

It has Fractenna (et all) somewhere in it.
```

2749. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA9B08.D4090A0A@mindspring.com>
Source record: 179877

Arrow146 wrote:

> >We really want to know:-)
> >
> >73
> >Chip N1IR
>
> WE ? You got a mouse in your pocket ?

No. I think he is just happy to see you. :-)

2750. Re: Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA9B8F.A30FF28@mindspring.com>
Source record: 179878

HEHE.. I have that as my desktop. Laughed my ass off when I saw it. Still
get a chuckle out of the kids eyes..hehe

Mark Keith wrote:

> Yuri Blanarovich wrote:
>
> >
> > And he has the guts to challenge people to contests?
> > I hope this helps to put CHIRP in proper light.
> > (With apology to original writer.)
> >
> > bada BUm
>
> I almost wet my pants reading that one...But seriously that all stems
> from the lack of a suitable diet when a youngster. All Texans are fed
> the right beginning foods at an early age. No strained cabbage, carrots,
> beets for us. Noooooooooooo....We start off right with this:
> http://web.wt.net/~nm5k/texbfood.jpg
>
> MK
> --
> http://web.wt.net/~nm5k

--
The preceding may or may not have been authored by myself but I offer it to
you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned
that I refuse to use a
spell checker and don't take criticism well.

2751. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39cf9c39.15810604@news.seanet.com>
Source record: 179879

On Thu, 21 Sep 2000 23:05:56 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>Also, ease of construction has not been my issue. The relative performance
>and the merits of the fractal geometry have been my issue. When I look at
>either antenna, I do not think either offer the claim of "ease of
>construction"
>
>73,
>Steve, VE9SRB
>

Hi Steve,

I am sure you will appreciate that the greater part of engineering is making a design producible, and marketable. I have also turned from practical designs because they do not further my understanding of the nature of the beast. I did however make an exception for the benefit of those posting here a week ago - but apparently the cult of personality was the real draw to this topic - not practical design.

Still and all, there are many downloading these practical designs from my temporary page even now with a stale link. My ISP provides great metrics service in regard to network traffic to my site and I can track some browsers and their host (the Army appears to be quite interested, that or they are interested in my Oxygen Sensor work or my design of the Flight Data Recorder).

As an engineer, I must say that the fqy solves the construction problem in probably the best manner for such a complex design. Unfortunately all the barbs pointed at your entrant also apply to any implementation of the fqy at 20 Meters (much less lower bands). What goes around comes around.

73's
Richard Clark, KB7QHC

2752. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39CA9EF8.1A2DF9B6@uci.edu>
Source record: 179880

Fractenna wrote:
> Believe me; peer reviewing is no biggie. If done, all that is needed is a
> statement in the acknowledgement that the article was peer reviewed.

As I'm sure you're aware, an article does not get published in a peer reviewed scientific journal unless and until all of the concerns and questions raised by the reviewers have been addressed to their satisfaction in the article. That's what 'peer reviewed' usually means. It means you basically place yourself at the mercy of the reviewers. Is this what you're suggesting?

73, AC6XG

2753. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39CA9FF5.E075B0CD@uci.edu>
Source record: 179881

Fractenna wrote:
> This thread is about honest, good operatin' great antenna competition!
>
> We should have ALL thought of it sooner!

Seems there's a contest just about every other weekend. I think sombody already did think of it. You could participate in one of them, and compare your score to the other participants scores. How about that for an idea?

73, Jim AC6XG

2754. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ca99f1.46261141@news.akorn.net>
Source record: 179882

On Thu, 21 Sep 2000 23:05:56 GMT, "VE9SRB" <srbest@worldnet.att.net>
Wrote:
>Also, ease of construction has not been my issue. The relative performance
>and the merits of the fractal geometry have been my issue. When I look at
>either antenna, I do not think either offer the claim of "ease of
>construction"
>73,
>Steve, VE9SRB

Ed and Steve, let me fill you in on this a bit,

Some consider all the Fractenna posts as "trolling", others have other names for it, but the result is very little technical information is exchanged in direct discussions with Fractenna.

The technical information rate, as a percentage of newsgroup time or kb of file size, is about as low as it gets. But maybe I can speed the exchange up a bit in this thread.

What I have gathered out of years of seriously trying to understand what Chip brings to the table... is this:

The general idea offered is form before function. Chip claims fractals have some unique property that, when used in an antenna and optimized, makes them "unbeatable".

The design system works this way. The "designer" keeps trying random fractal shapes and eventually hits one that sort of fits an application. The designer then uses a computer to refine the shape through a series of trial and error changes until the "form" winds up as good as it can get within certain guidelines.

So far, this has been the technical limit of what has been offered to this group, and to our fraternity.

If you think about what you are not involved with, it disproving his claim that he has optimized the antenna for a certain set of parameters.....and that you can't change his design to make it any better (he hides his desin to prevent that).

As you all know, the way product engineering normally works is the designer looks at all other past solutions in detail and takes the "good things" from each. You can't do that, because the original design you are supposed to beat is hidden.

The gurantee of not solving this conumdrum revolves around the fact a hidden design sets the parameters or limits, and you have to handle

the problem the long way and find something that fits guidelines formed around the "hidden" solution.

When a particular device already defined sets the limits (form before function), it really is difficult to find something that "beats" that device in all parameters. It is time consuming, and there is no reward except the satisfaction of deflating an ego that is intentionally designed to cry for a sharp pin-prick.

For example, Steve suggested one antenna as a small helix formed in a larger loop and Chip sneered at it. The only reason that can happen is Chip set the guidelines around an antenna that he randomly stumbled upon, and refined through trial and error. Where that antenna "wound up" is where the goal has been set, and Steve has to engineer a solution to an equation written by a monkey at a typewriter.

If we change one parameter, like say the frequency, and move it to somewhere in mid-VHF...suddenly Steve's helical loop has huge mechanical advantages. It could be automatically manufactured out of one piece of conductor, and self support. Tooling would be cheap, it would be easy to tune. If we used Steve's loop, and designed the guidelines around it, Chip would have a difficult if not impossible time beating the loop. Unfortunately, the troll sets the guidelines.

We can do that with almost any antenna, there is no magic in any of this. When form preceeds and defines all the parameters, it's difficult to design someting else to "beat it".

In the long scheme of things this entire fractal thing is totally meaningless. No one will lean how an antenna radiates, no one will learn how to fill a defined set of parameters, and we certainly won't learn how to be gentleman or helpful to each other.

With all this considered, the only conclusion I can reach is this is all a giant time wasting troll. We all could be doing more productive things.

73 Tom

2755. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39caad66.51242906@news.akorn.net>
Source record: 179883

On 21 Sep 2000 23:22:59 GMT, fractenna@aol.com (Fractenna) wrote:

>I realized that you were putting us all on Steve, and thought I'd go along with
>your joke.
>
>It WAS funny! Not much antenna humor around:-)
>
>73
>Chip N1IR

You have been sucessfully trolled Steve.

2756. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <22aeq8.h3e.ln@mail.specsol.com>
Source record: 179884

Fractenna <fractenna@aol.com> babbled several times, not knowing how things
work in the real world:
>>
>>ANSWER the question: where do you find a complaint
>>in the questions?
>>
>>Fractenna wrote:
>>
>>> >Chip,
>>> >
>>> >Where do you find a complaint in the questions?
>>> >
>>> >Fractenna wrote:
>>> >
>>> >> >What makes you say the antenna "works", and what do you
>>> >> >mean by "works"?
>>> >> >
>>> >> >Have you used a 10 M - or other ham band - fractal antenna?
>>> >> >
>>> >> >> Dino
>>> >> >>
>>> >> >
>>> >
>>> >> Either stop complaining or give something concrete that can be
>>discussed.
>>> >>
>>> >> 73
>>> >> Chip N1IR
>>> >
>>> >
>>>
>>> Who are you?
>>>
>>> NC
>>
>>
>>
>>
>>
>>
>>

> Who are you?

> NC

ehsjr@bellatlantic.net, can't you read?

Most places only have one individual behind an account name.

Jim Pennino

2757. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <45aeq8.h3e.ln@mail.specsol.com>
Source record: 179885

Tom W8JI <2w8ji@contesting.com> wrote:
> On 21 Sep 2000 22:00:53 GMT, fractenna@aol.com (Fractenna) wrote:

>>>All newsgroup members are directed to Lance Morrow's commentary on page 22 of
>>>the September 25th issue of Time Magazine. It profiles a particularly
>>>familiar
>>> type of internet behavior and is entitled, "Every Man a Blowhard".
>>>
>>>Rick K1BQT
>>
>>
>>You made the bigTIME!
>>
>>Cool!
>>
>>73
>>Chip N1IR

> Rick,

> I believe Chip now owes you 100 dollars.

> While you didn't name him in an insult, he directly named you as a
> "blowhard".

> Wasn't that the terms of your agreement?

> 73 Tom

Yes, it was.

Anyone taking side bets on whether or not Chip pays up?

Jim Pennino

2758. Re: mulit band dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CAB070.CB3B9D09@bigfoot.com>
Source record: 179886

ka4oww@earthlink.net wrote:
> I am planning to build a multiband dipole like the AlpahDelta.
> Is there any reason that I can not feed a
> 40mtr,20mtr,18,mtr,12mtr,10mtr with a single feed line?

On my web page, I have an article about such a dipole published
in Worldradio and reprinted by permission - and it's even
rotatable. There is absolutely no reason why a multiband
dipole cannot be fed with ladder-line (maybe unless one lives
in a rain forest).
--
http://www.mindspring.com/~w6rca

2759. Re: Alpha Delta Antennas COMMENTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Nb7KOXmvYlwOMxLMkVhWIa=g9lGb@4ax.com>
Source record: 179887

Joe & Bonita Sanada <bsanada01@snet.net> wrote:

>Hi I am looking to purchase an Alpha Delta DX-LB 160-10 meter Antenna
>
>anyone have any comments on ANY of the Alpha Antenna products I
>
>appreciate it thanks 73 Joe. W1JAS Terryville, Connecticut....
>

I bought one of their swl listening antennas. Built like a battleship.
High quality wire and insulators.

Haven't tried their transmitting antennas, but the parts quality is
high on A-D products.

Bob
k5qwg

2760. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39CAC3CB.DC760577@tpi.net>
Source record: 179888

Stan
We (Elk Antennas) make a very small 5 element (2 foot boom) log periodic that
can be used indoors because of its small size. I used one (hung from the ceiling

with a harness made from fishing monofilament line) for many years for packet.
As long as you don't get in front(or within 2 feet of the sides) of the antenna
you should have no RF exposure. The SWR is 1:1 across the 2M band and no worse
than 1.4:1 440 to 450 MHz. Gain on 2M was measured at 6 dBd.
If you are at all interested, I'll e-mail directivity plot and photos.
Best wishes de ray, w6fya
Stan Olson wrote:

> I live in the first floor of a dorm and I was wondering if there was any
> sort of antenna I could build or buy to improve reception / transmit on
> 2m/440... Outside antennas are not an option, so it has to be completely
> indoors. I've got an Icom W32A with a Comet BNC24 whip antenna on it right
> now. It works fairly well, but I was curious if there was anything else
> better to try other than walking outside and trying there, hehe. Would a mag
> mount dual band antenna work indoors? (would I be harmed by the RF?) If
> anyone has any ideas, please let me know. I bought the 'Stealth Antennas'
> book by ARRL, but it was disappointing with it's lack of indoor options.
> Thanks!
>
> Stan Olson
> solso@advancenet.net

2761. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <roheq8.r1l.ln@mail.specsol.com>
Source record: 179889

Fractenna <fractenna@aol.com> wrote:

<big snip>

> The REAL question is: what RIGHT does this former TV repairman with no
> publishing record HAVE to 1) harass and libel; 2) threaten my life?

> Don't be diverted: I am not.

> Nathan Cohen, Ph.D.

The REAL question is how did you get to be such a pompous ass?

I'd trust the "former TV repairman" a lot more than I'd trust an arrogant
Ph.D.

Jim Pennino

2762. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CACF5C.9BE09136@bigfoot.com>
Source record: 179890

Jnrv1978 wrote:
> I am just getting my first HF rig and am trying to decide what to get for an
> antenna. I am on a really tight budget so some things are out. I have been
> looking at the broadband folded dipole by B&W. I like the fact that it won't
> require a tuner. A couple of questions please. What do you think of this
> antenna? Does it tend to be directional? Which way is the best to use it, as
> an inverted V, flat, or sloper? Do you have any other suggestions for
> antennas? I live in west central South Carolina. Thanks for the read! Jon.

Why anybody on a tight budget would consider the B&W is beyond comprehension.
On certain bands, its efficiency is pretty low. Put up a dipole 1/2WL on the
lowest frequency of operation and feed it with open-wire line. That's about
$25 worth of wire that works well on all HF bands. You can find out about
such an antenna at:
--
http://people.delphi.com/cecilmoore/mystery.htm

2763. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CAD407.F4BCF0E2@hiwaay.net>
Source record: 179891

Jon- save your money on the B&W and put up a simple dipole with ladder line. Also- get a tuner, because you will need one sooner or later, they are not as lossy as some preach, and it does make life easier.
Making the antennas yourself will be a good step toward self-sufficiency, and - (a little known secret)- a person is far more likely to adjust an antenna he made himself, to get it to work best, than to do the same thing with one designed by an "expert".

Good luck- and do it- Bill- W4BSG

Jnrv1978 wrote:
>
> I am just getting my first HF rig and am trying to decide what to get for an
> antenna. I am on a really tight budget so some things are out. I have been
> looking at the broadband folded dipole by B&W. I like the fact that it won't
> require a tuner. A couple of questions please. What do you think of this
> antenna? Does it tend to be directional? Which way is the best to use it, as
> an inverted V, flat, or sloper? Do you have any other suggestions for
> antennas? I live in west central South Carolina. Thanks for the read! Jon.

2764. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <93-39CAD535-55@storefull-116.iap.bryant.webtv.net>
Source record: 179892

Yuri, K3BU wrote:
"Any known and proven method of doing that?"

Conductivity can be determined by comparing the attenuation on a radial path from an AM broadcast station with the FCC`s published curves for the frequency of the field strength measurements. You find the curve which best fits your measurement data. Each curve is for a specific conductivity in millivolts per meter.

You need a field strength meter, a U.S. Geological Coast and Geodetic Survey map for the area, and a GPS set would be helpful. You need the FCC conductivity curves, of course.

Make Lattitude and longitude marks through the transmitter antenna location on the map. A protractor can be used to plot radials you will explore on the map. Choose and mark likely accessible measurement sites on the map. Many may not work because of conducting structures nearby which upset the radiated field in their vicinity. The closest measurement site to the transmitter should be well into the far field.

Find a lot of sites. Keep good records. Do several radials and several sites along each radial. You will be interested in the field strengths at the water`s edge where the radial crosses the shore on opposite sides. The averages obtained from attenuations along the radials should nail the conductivity of surface of the pond, the prairie, or whatever the groundwave is traversing. Computations can show what attenuation soil of this conductivity will produce at other frequencies.

You can compute penetration from conductivity and freqquency, but what will you do with the penetration information?

Best regards, Richard Harrison, KB5WZI

2765. Re: Alpha Delta Antennas COMMENTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39cade32$0$1372$45beb828@newscene.com>
Source record: 179893

Have an evesdropper (SWL) and a DX-EE (40m through 10m). Works well,
built well. Its slightly difficult to put to gether (You have to thread
the wires through the separators). Me, I would just attach them with heavy
wire supplied and non worry about threading.

Worked great. Worked the world with it strung up in my attic.

--jeffrey steinberg, kc2guc

In article <39CA65E5.3CFA81EB@snet.net>, bsanada01@snet.net says...
>
>Hi I am looking to purchase an Alpha Delta DX-LB 160-10 meter Antenna
>
>anyone have any comments on ANY of the Alpha Antenna products I
>
>appreciate it thanks 73 Joe. W1JAS Terryville, Connecticut....
>
>

2766. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39cadef7$0$1372$45beb828@newscene.com>
Source record: 179894

Chip,

How many hours a day do you spending in this newgroup. I mean that
as a serious question. The sheer number of posts indicates a lot
of lost antenna designing time and on-the-air operating or are you
doing this while on the air?

--jeffrey steinberg, kc2guc

In article <c2ry5.57$0a1.2157@bgtnsc04-news.ops.worldnet.att.net>,
srbest@worldnet.att.net says...
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000920050447.22365.00000113@ng-fc1.aol.com...
>>
>> <snip>
>>
>> On (3),I suggest that you do, indeed, publish your random design--as any
>small
>> antenna --the MI2 a prime example-- with 1.9 dBi **directivity** and high
>> efficiency is valuable. I do, however, have grave doubts that you have
>such a
>> design, based on your confusion between directivity and gain.
>>
>> I would like to give you an opportunity to recant your statement that you
>have
>> an "arbitrarily chosen random design". This is surely wrong. This says
>that one
>> may choose any other random design and attain the same result.
>>
>> <snip>
>>
>> 73
>> Chip N1IR
>
>I converted my NEC4 input files over to EZNEC and ran the calculations again
>so that I could provide gain numbers for both antennas. As stated above,
>Dr. Cohen does not believe the random geometry configuration that I came up
>with could be as efficient as the MI2 Fractal Loop.
>
>Just to recap: One antenna is the MI2 Fractal Loop that Dr. Cohen described
>in the his Comm Quart articles. This is the same antenna identified in his
>$1000 Fractal Antenna Challenge thread. The second antenna is a random
>geometry (non-fractal) configuration that I believed would have similar

>performance characteristics as compared to the MI2 Fractal Loop. Note that
>both antennas have the same wire length and occupy the same physical
>aperture.
>
>Results:
> MI2 Random
>
>Resonant Frequency: 15.15 MHz 14.83 MHz
>
>Resonant Resistance: 28 ohms 27 ohms
>
>Gain (Cu wire): 1.83 dBi 1.83 dBi
>
>73,
>Steve VE9SRB
>
>

2767. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA66F8.135EC715@mindspring.com>
Source record: 179919

Jim Kelley wrote:

> VE9SRB wrote:
> >
> > "Fractenna" <fractenna@aol.com> wrote in message
> > news:20000921140538.26918.00000100@ng-md1.aol.com...
> > > >
> > > >
> > > > I'm having a SUPER day, thanks:-) In fact one of the best of my career:-)
> > > >
> > >
> > > Good for you.
> > >
> > > >
> > > > But you didn't answer my question. Please do so.
> > > >
> > > > 73
> > > > Chip N1IR
> > >
> > > What question?
> > >
> > > Steve
> >
> > He probably doesn't have time to ask it.

Yeah. Besides, you should go back through the archives if you want to know what question he wants you to answer for him to know the answer to his question that you don't know that was asked. By him.
Hope this helps. :-)

2768. Re: Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <39CA6C9C.A3B59@aztek-eng.com>
Source record: 179920

Yuri,

Thank you for my a really good laugh. Having lived in Texas for a few years and "accidentally" attending a few chili cookoffs I could easily imagine the proceedings. I laughed harder than I had in weeks.

Larry, W0QE

2769. Killing my kill file

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "R.L. Bo Thompson" <kb5cng@amsat.org>
Message-ID: <8qdqnr$76e$1@ionews.ionet.net>
Source record: 179921

I sure wish you guys would decide on a single
spelling for fractal. I'm getting tired of having to
add "silly spellings" to my kill file!!
73
Bo

--
R. L. "Bo" Thompson, KB5CNG <kb5cng@amsat.org>

2770. Re: Help with random Wire with AH4

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CA7153.99ACA9F8@oio.net>
Source record: 179922

Paul,
Sounds like you have enough room for a fair sized antenna. One
way would be to put the tuner in the center of a 50' side, giving you
24' + 24' = 48' on each side of the tuner. Thats almost enough for
80 meters, and the tuner should(?) handle it fine. I wouldn't worry
about grounding either side of the antenna.
Any antenna 'near' electric lines (house wiring) is prone to
picking
up noise...
'Doc

2771. Re: IDEAL ANTENNA,A MOVING TARGET!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CA7405.235FD110@fgi.net>
Source record: 179923

Arthur Unwin wrote:

> Having followed this antenna newsgroup for a few years
> I have never seen a discussion of what constitutes
> a good antenna. Isn,t that amasing?

.....
Yuri asked for a more precise question than above

Point I was trying to make was that no matter what
antenna that was brought forth with this group the resident
guru,s would only bring up the negatives!
The rest of that particular post is as below
but some of the comments will be repeated
many times in the future I,m sure
.....

> It is always turned aside as a
> question of individual compromise When each
> of the attributes of an antenna is brought forward
> it always gets turned aside by those, well those that know!
>
> Front to back,..... doesn,t happen, it washes away
> Front to back.....I never hear people at the back

> always at the side
> High gain,..... you lose out on impedance
> Side lobes.....side lobes?
> Good front to rear, ..near impossible to realise
> Low take of angle, ..biggest old wife's tale around
> High take of angle.....a cloud burner
> High tower, ...useless after sun rise
> Low beam, ...doesn,t hear good
> Directive beam,..... too narrow to catch the elusive DX
> Long boom.....beaten by a three element beam
> Long wire..... can be beaten by feeding a tree
> Long wire.....doesn,t meet expectations
> G5rv.....lobes in wrong place
> Low impedance, ...impossible to match
> High impedance, ...requires DRY ladder lines
> Order of merit for radiation to front/rear,..... there ain,t one!
> Radials,..... you don,t have enough
> Horizonal,..... better to be vertical
> Vertical,..... useless, ground losses,noisy
> Traps.....'huge' losses
> Ham radio demise.....see computor discussions

> Experimenting demise.....see rec radio antenna discussions
> S meter.....useless
> Measurements.....not done correctly
> programs.....misuse
> swr.....what do you mean
> swr.....meter not right
> swr.....unimportant
> Indisputable facts.....you are not listening to me.
> Common mode currents.....depends on who,s talking
> Balun,s.....depends on who,s listening
> Fractals.....a communal mud wash
> snip
>
> Sorry about this, Sunday Morning America is so depressing
>
> Art Unwin KB9MZ

2772. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Bvuy5.721$u95.2378028@news.ntplx.net>
Source record: 179924

<klocko@toad.net> wrote in message news:8qbnpp$63s$1@nnrp1.deja.com...

> Did you lose me in the noise? I'd like to keep the discussion going -
> it's getting pretty interesting. See my reply to your post last night.
> vy 73,
> Bill N3WK

I am afraid that I did. Fractenna's repeated disruptions of this NG did seem to manage to accomplish his purpose here -- to be disruptive. There were so many Fractenna posts and responses to same that I may have a bit of trouble finding my post to direct you to it.

The only way I can really think of to end this is to simply ignore the posts and continue to respond to those who post something not related to his failed attempt to end the thread. I was going to change the thread name, but noted that he started in again this morning, so changing the thread name would NOT be ignoring him, so I don't think it appropriate to do so.

I must say that of all of the posts I have seen in 10 years of NG participation, his repetitive tirade was about the least mature. I felt bad enough about my "pot, kettle, black" quip; I can't imagine how he could not be deeply ashamed of his conduct.

73,
Ed Hare, W1RFI

2773. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <lxuy5.722$u95.2378322@news.ntplx.net>
Source record: 179925

I found it. Here is a repost:

<klocko@toad.net> wrote:

> If you mean the gain in the presence of the building or ground as
> reflected in the pattern, I agree. Are you saying a loss through a
> building should be factored into the gain or factored out? If it's an
> absorption loss due to material (brick, wood, etc), I think I'd keep
> that a separate term.

Of course, if one is trying to do some sort of measurement of the gain of an antenna, ideally, the building wouldn't be a factor at all. :-) If a real world gain, if the building acts to add gain, I would figure it in; if it subtracts, I would figure that in, too. Otherwise, how would one differentiate between a gain change that was as a result of propagation loss through a building and one that is the result of the addition of more "parasitic elements" due to the building, which could just as easily detune the antenna and change the current and phase relationships and decrease the gain (and degrade the pattern) through that mechanism.

> > As a last point of reference, over "average" ground, a half-wave
> dipole up a
> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
> is a
> > gain of about 5.2 dBd.

> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
> between dBi and dBd values.

I picked a few nits, so you are welcome to do so. I usually round to the nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that there is a full 0.1 dB of precision between the model and reality.

> One other point. Sometimes the ERP (the power at the antenna times the
gain of the antenna referenced to a
> half-wave dipole) is needed. The value of gain used in the calculation
might then need to adjusted by that nasty little 2.15 dB
> term.

Yes, I think that the RF exposure regs, for example, exempt repeaters with <500 ERP from the need to be evaluated.

73,
Ed Hare, W1RFI

<klocko@toad.net> wrote in message news:8qbnpp$63s$1@nnrp1.deja.com...
> In article <0YSx5.705$u95.2248226@news.ntplx.net>,

> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> >
> > Also, that dBi reference is for the gain of the antenna in situ; ie,
> over
> > ground, with any other attenuations factored (loss through buildings,
> etc.)
>
> Hi Ed,
> Did you lose me in the noise? I'd like to keep the discussion going -
> it's getting pretty interesting. See my reply to your post last night.
> vy 73,
> Bill N3WK
>
>
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2774. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <gBuy5.727$6T.65999@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179926

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921150529.26895.00000143@ng-md1.aol.com...
>
> All random shaped ones are.
>
>
> >Actually, randomly shaped antennas are not fractals.
> >
>
> Yes they are. You do not understand fractals if you say this.
>
>

I don't have any time for "yes they are! No their not" We disagree, so
what.

> >>which has similar but
> >> not better performance FOM than the MI2 I have previously published.
> >>
> >
> >I never said it had to be better. I simply claimed that a random
geometry
> >would provide similar performance.
> >
>
> Well, show me. Provide the file you publicly offered to provide.
>

I asked you to send me your MI2 eznec file two weeks ago. Did you send it?

>
> Don't have to. However, if you are of the opinion that all loops of a
given
> length of wire can produce oodles and oodles of antennas with the same
> resonance and efficiency and gain and directivity, then you are wrong. It
> would make an interesting paper though. Why don't you publish it and then
> others can publish papers showing your errors.
>
> Last year there was a paper on meander loading which made outrageous
claims on
> efficiency (in Transactions) that even we on this NG showed to be wrong.
So I
> guess there is room for false assertions.
>
>

> >> The entire point of the FRACTAL ANTENNA CHALLENGE is to find a better
> >> performer. You tried, and failed, but you learned a lot about the
benefits
> >of
> >> fractal antennas and that is a very,very good thing.
> >>
> >
> >Actually, I think the Fractal Challenge is part of an ongoing effort of
self
> >promotion (my personal opinion, no offence intended).
>
> I do take offense. If this is the case, then to what end is such
self-promotion
> done?
> So that I can have W8JI threaten to kill me?
>
>
> I think you expected
> >no one to really come up with a design that was even close.
> >
>
> Steve, I founded fractal element design 12 years ago. I've seen it all. It
may
> be new to you, but I've been around the corner a few times.
>
> Close isn't better, is it?

You have seen it all?? Think about someone actually believing this of themselves.

>
> You said you had a spiral for 14 Megs that was 5 inches in size. Tell us
about
> it.
>

I never said I has a spiral. Do you actually read anything? I said I had a helically wound loop and the helix section was 5 inches in diameter and the total wire length was 1.5 wavelengths. I am not sure what your motive is in continualy misrepresenting my statements. I have corrected you several times. The file has 500+ segments. When I get EZNEC Pro, I will run it.

In the meantime, I have no interest in getting sucked into a foolish round of posts back and forth like this is starting to turn into. My random geometry works the same as the MI2 Fractal - deal with it.

73,
Steve

2775. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921165442.16164.00000133@ng-cg1.aol.com>
Source record: 179927

>
><klocko@toad.net> wrote in message news:8qbnpp$63s$1@nnrp1.deja.com...
>
>> Did you lose me in the noise? I'd like to keep the discussion going -
>> it's getting pretty interesting. See my reply to your post last night.
>> vy 73,
>> Bill N3WK
>
>I am afraid that I did. Fractenna's repeated disruptions of this NG did seem
>to manage to accomplish his purpose here -- to be disruptive. There were so
>many Fractenna posts and responses to same that I may have a bit of trouble
>finding my post to direct you to it.
>
>The only way I can really think of to end this is to simply ignore the posts
>and continue to respond to those who post something not related to his
>failed attempt to end the thread. I was going to change the thread name, but
>noted that he started in again this morning, so changing the thread name
>would NOT be ignoring him, so I don't think it appropriate to do so.
>
>I must say that of all of the posts I have seen in 10 years of NG
>participation, his repetitive tirade was about the least mature. I felt bad
>enough about my "pot, kettle, black" quip; I can't imagine how he could not
>be deeply ashamed of his conduct.
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>
>
>

This thread is closed.

NC

2776. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921165654.16203.00000162@ng-cg1.aol.com>
Source record: 179928

>
>I found it. Here is a repost:
>
><klocko@toad.net> wrote:
>
>> If you mean the gain in the presence of the building or ground as
>> reflected in the pattern, I agree. Are you saying a loss through a
>> building should be factored into the gain or factored out? If it's an
>> absorption loss due to material (brick, wood, etc), I think I'd keep
>> that a separate term.
>
>Of course, if one is trying to do some sort of measurement of the gain of an
>antenna, ideally, the building wouldn't be a factor at all. :-) If a real
>world gain, if the building acts to add gain, I would figure it in; if it
>subtracts, I would figure that in, too. Otherwise, how would one
>differentiate between a gain change that was as a result of propagation loss
>through a building and one that is the result of the addition of more
>"parasitic elements" due to the building, which could just as easily detune
>the antenna and change the current and phase relationships and decrease the
>gain (and degrade the pattern) through that mechanism.
>
>> > As a last point of reference, over "average" ground, a half-wave
>> dipole up a
>> > half-wavelength has a gain of about 7.8 dBi. Very interestingly, this
>> is a
>> > gain of about 5.2 dBd.
>
>> Hmmm... Not to be nit-picky, but there should be a difference of 2.15 dB
>> between dBi and dBd values.
>
>I picked a few nits, so you are welcome to do so. I usually round to the
>nearest 0.1 dB when I give results from EZNEC. Even then, I doubt that there
>is a full 0.1 dB of precision between the model and reality.
>
>> One other point. Sometimes the ERP (the power at the antenna times the
>gain of the antenna referenced to a
>> half-wave dipole) is needed. The value of gain used in the calculation
>might then need to adjusted by that nasty little 2.15 dB
>> term.
>
>Yes, I think that the RF exposure regs, for example, exempt repeaters with
><500 ERP from the need to be evaluated.
>
>73,

>Ed Hare, W1RFI
>
><klocko@toad.net> wrote in message news:8qbnpp$63s$1@nnrp1.deja.com...
>> In article <0YSx5.705$u95.2248226@news.ntplx.net>,
>> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>> >
>> > Also, that dBi reference is for the gain of the antenna in situ; ie,
>> over
>> > ground, with any other attenuations factored (loss through buildings,
>> etc.)
>>
>> Hi Ed,
>> Did you lose me in the noise? I'd like to keep the discussion going -
>> it's getting pretty interesting. See my reply to your post last night.
>> vy 73,
>> Bill N3WK
>>
>>
>>
>> Sent via Deja.com http://www.deja.com/
>> Before you buy.
>
>
>
>
>
>
>
>

This thread is closed.

NC

2777. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <wluy5.723$u95.2379158@news.ntplx.net>
Source record: 179929

Fractenna <fractenna@aol.com> wrote:

> My comments were not directed to you sir; furthermore I have asked you to
stop
> communicating with me.

I am sorry, NC, but in a public forum, one is not really communicating with any individual; they are communicating with the group. I can think of no practical way to exclude you from that communication. The ability to do that is under YOUR control, so if you do not want to see my responses to your posts, you are welcome to use your killfile.

>>I think I can see the confusion; a truly "random" design could be resonant
at
>>any random frequency or frequencies, complicating this discussion
immensely.
>>Perhaps it could be more accurate to describe his antenna simply as a
random
>>design that meets the resonance criteria; certainly there are a lot of
easily
>>discovered possible designs that are sufficiently random.

I do want to clarify one point in the above statement. In the second sentence, "his antenna" refers to the random design offered here by VE9SRB, not to the any of the fractal products. I do not know the extent to which a fractal design differs from a random design; I have not read any paper that really treats the electromagnetics of the fractal design vis a vis other techniques to make physically smaller antennas. The only real data I have read is the posted info of VE9SRB's random design vs the fractal, and I do not feel that his post is enough for me to draw any firm conclusions. After reading my paragraph, however, I realized that my careless use of a pronoun where it was not clear to whom the pronoun was associated. Again, let me make it clear that the above paragraph is made about VE9SRB's random-design post.

73,
Ed Hare, W1RFI
>
> My statement was clear. IF such a random loop exists, it, by definition of
> 'arbitrary', cannot be arbitrary in how it was chosen.
> If this were so, then it would be just as likely that its attribute would
be
> shared by many, if not all, others.
>
> NC

2778. Chirps Chilli Contest Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921170604.23906.00000209@ng-fs1.aol.com>
Source record: 179930

Notes From An Inexperienced Chili ConTaster Named CHIRP (famous East Coast contester, DXer and best antenna designer ever lived), who was visiting Texas from the East Coast:

"Recently I was honored to be selected as an outstanding Famous Fractal celebrity in Texas, to be a judge at a chili cook-off, because no one else wanted to do it. Also the original person called in sick at the last moment, and I happened to be standing there at the judge's table asking directions to the beer wagon when the call came. I was assured by the other two judges (Native Texans) that the chili wouldn't be all that spicy, and besides they told me I could have free beer during the tasting, so I accepted."

Here are the scorecards from the event:

Chili # 1: Mike's Maniac Mobster Monster Chili

JUDGE ONE: A little too heavy on tomato. Amusing kick.
JUDGE TWO: Nice, smooth tomato flavor. Very mild.
CHIRP: Holy shit, what the hell is this stuff? You could remove dried paint from your driveway with it. Took me two beers to put the flames out. Hope that's the worst one. These Texans are crazy.

Chili # 2: Arthur's Afterburner Chili

JUDGE ONE: Smoky, with a hint of pork. Slight Jalapeno tang.
JUDGE TWO: Exciting BBQ flavor, needs more peppers to be taken seriously.
CHIRP: Keep this out of reach of children! I'm not sure what I am supposed to taste besides pain. I had to wave off two people who wanted to give me the Heimlich maneuver. They had to walkie-talkie in 3 xtra beers when they saw the look on my face.

Chili # 3: Fred's Famous Burn Down the Barn Chili

JUDGE ONE: Excellent firehouse chili! Great kick. Needs more beans.
JUDGE TWO: A beanless chili, a bit salty, good use of red peppers.
CHIRP: Call the EPA, FCC, I've located a RF or uranium spill. My nose feels like I have been snorting Drano. Everyone knows the routine by now. Barmaid pounded me on the back; now my backbone is in the front part of my chest. I'm getting shit-faced.

Chili # 4: Bubba's Black Magic

JUDGE ONE: Black bean chili with almost no spice. Disappointing.
JUDGE TWO: Hint of lime in the black beans. Good side dish for fish or other mild foods, not much of a chili.
CHIRP: I felt something scraping across my tongue, but was unable to taste it. Sally, the bar maid, was standing behind me with fresh refills; that 300lb.

bitch is starting to look HOT, just like this RF nuclear-waste I'm eating.

Chili # 5: Linda's Legal Lip Remover

JUDGE ONE: Meaty, strong chili. Cayenne peppers freshly ground, adding considerable kick. Very impressive.
JUDGE TWO: Chili using shredded beef; could use more tomato. Must admit the cayenne peppers make a strong statement.
CHIRP: My ears are ringing, and I can no longer focus my eyes. I farted and four people behind me needed paramedics. The contestant seemed offended when I told her that her chili had given me brain damage. Sally saved my tongue from bleeding by pouring beer directly on it from a pitcher. It really pisses me off that the other judges asked me to stop screaming.

Chili # 6: Vera's Very Vegetarian Variety

JUDGE ONE: Thin yet bold vegetarian variety chili. Good balance of spice and peppers.
JUDGE TWO: The best yet. Aggressive use of peppers, onions, and garlic. Superb.
CHIRP: My intestines are now a straight pipe filled with gaseous, sulfuric flames. No one seems inclined to stand behind me except that slut Sally. I need to wipe my ass with a snow cone!

Chili # 7: Susan's Screaming Sensation Chili

JUDGE ONE: A mediocre chili with too much reliance on canned peppers.
JUDGE TWO: Ho Hum, tastes as if the chef literally threw in a can of chili peppers at the last moment. I should note that I am worried about Judge Number 3. He appears to be in a bit of distress as he is cursing uncontrollably.
CHIRP: You could put a grenade in my mouth, pull the pin, and I wouldn't feel a damn thing. I've lost the sight in one eye, and the world sounds like it is made of rushing water. My shirt is covered with chili hich slid unnoticed out of my mouth. My pants are full of lava-like shit to match my damn shirt. At least during the autopsy they'll know what killed me. I've decided to stop breathing, it's too painful. I'm not getting any oxygen anyway. If I need air, I'll just suck it in through the 4-inch hole in my stomach.

Chili # 8: Helen's Mount Saint Chili

JUDGE ONE: A perfect ending, this is a nice blend chili, safe for all, not too bold but spicy enough to declare its existence.
JUDGE TWO: This final entry is a good, balanced chili, neither mild nor hot. Sorry to see that most of it was lost when Judge Number 3 passed out, fell and pulled the chili pot on top of himself. Not sure if he's going to make. Poor Yank.
CHIRP: --------------(editor's note: Judge #3 was unable to report)"

And he has the guts to challenge people to contests?
I hope this helps to put CHIRP in proper light.
(With apology to original writer.)

bada BUm

2779. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000921171430.13121.00000085@ng-ci1.aol.com>
Source record: 179931

Hi Ed--

>Fractenna's repeated disruptions of this NG did seem to manage to accomplish his purpose here -- to be disruptive.<

You may not wish to call Dr. Cohen's actions disruptive and offend him. I understand he may be negotiating with Mark Wilson to author a fractal article for QEX.

Rick K1BQT

2780. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <56-39CA73EB-68@storefull-117.iap.bryant.webtv.net>
Source record: 179932

Yuri wrote:
"---trying to find where is the best RF ground and terrain."

That is related to soil conductivity, alright. I recall checking the salinity of distilled fresh water on my ship in WW-2. The gauge was just a simple ohmmeter with electrodes in the stream of water from the evaporator. It doesn`t take much carry-over of salt to bring the resistance of the water down. But, it doesn`t take much salt to make the solution about as conductive as it will ever get.

The CRC "Handbook of Chemistry and Physics" gives the millimhos per centimeter for various percentages by weight of anhydrous solute between 0.5% and 6%. After 6% concentration is reached, the point of diminishing returns seems to have been reached in increased conductivity. In any case, that`s where the report on salinity and conductivity stops. The extremes are 7.8 mmho/cm and 72.6 mmho/cm. The FCC 5000 mmho/m for sea water conductivity is taken on a cube with 10,000 times the area and 100 times the distance between faces so division by 100 should give the mmho/cm, or 50 mmho/cm, which is better than artificial sea water with 0.5% salinity and 7.8 mmho/cm, and a conductivity that is not so good as 6% salinity and 72.6 mmho/cm.

All measurements were made on artificial sea water as formulated by Lyman and Fleming and reported in 1940.

The point is you are not likely to find a natural saline concentration on earth which is significantly better as a conductor than sea water.

Best regards, Richard Harrison, KB5WZI

2781. CHIRP CHILI CONTEST CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921171938.23919.00000174@ng-fs1.aol.com>
Source record: 179933

Notes From An Inexperienced Chili ConTaster Named CHIRP (famous East Coast contester, DXer and best antenna designer ever lived), who was visiting Texas from the East Coast:

"Recently I was honored to be selected as an outstanding Famous Fractal celebrity in Texas, to be a judge at a chili cook-off, because no one else wanted to do it. Also the original person called in sick at the last moment, and I happened to be standing there at the judge's table asking directions to the beer wagon when the call came. I was assured by the other two judges (Native Texans) that the chili wouldn't be all that spicy, and besides they told me I could have free beer during the tasting, so I accepted."

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JUDGE TWO: Exciting BBQ flavor, needs more peppers to be taken seriously.
CHIRP: Keep this out of reach of children! I'm not sure what I am supposed to taste besides pain. I had to wave off two people who wanted to give me the Heimlich maneuver. They had to walkie-talkie in 3 xtra beers when they saw the look on my face.

Chili # 3: Fred's Famous Burn Down the Barn Chili

JUDGE ONE: Excellent firehouse chili! Great kick. Needs more beans.
JUDGE TWO: A beanless chili, a bit salty, good use of red peppers.
CHIRP: Call the EPA, FCC, I've located a RF or uranium spill. My nose feels like I have been snorting Drano. Everyone knows the routine by now. Barmaid pounded me on the back; now my backbone is in the front part of my chest. I'm getting shit-faced.

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JUDGE TWO: Hint of lime in the black beans. Good side dish for fish or other mild foods, not much of a chili.
CHIRP: I felt something scraping across my tongue, but was unable to taste it. Sally, the bar maid, was standing behind me with fresh refills; that 300lb.

bitch is starting to look HOT, just like this RF nuclear-waste I'm eating.

Chili # 5: Linda's Legal Lip Remover

JUDGE ONE: Meaty, strong chili. Cayenne peppers freshly ground, adding considerable kick. Very impressive.
JUDGE TWO: Chili using shredded beef; could use more tomato. Must admit the cayenne peppers make a strong statement.
CHIRP: My ears are ringing, and I can no longer focus my eyes. I farted and four people behind me needed paramedics. The contestant seemed offended when I told her that her chili had given me brain damage. Sally saved my tongue from bleeding by pouring beer directly on it from a pitcher. It really pisses me off that the other judges asked me to stop screaming.

Chili # 6: Vera's Very Vegetarian Variety

JUDGE ONE: Thin yet bold vegetarian variety chili. Good balance of spice and peppers.
JUDGE TWO: The best yet. Aggressive use of peppers, onions, and garlic. Superb.
CHIRP: My intestines are now a straight pipe filled with gaseous, sulfuric flames. No one seems inclined to stand behind me except that slut Sally. I need to wipe my ass with a snow cone!

Chili # 7: Susan's Screaming Sensation Chili

JUDGE ONE: A mediocre chili with too much reliance on canned peppers.
JUDGE TWO: Ho Hum, tastes as if the chef literally threw in a can of chili peppers at the last moment. I should note that I am worried about Judge Number 3. He appears to be in a bit of distress as he is cursing uncontrollably.
CHIRP: You could put a grenade in my mouth, pull the pin, and I wouldn't feel a damn thing. I've lost the sight in one eye, and the world sounds like it is made of rushing water. My shirt is covered with chili hich slid unnoticed out of my mouth. My pants are full of lava-like shit to match my damn shirt. At least during the autopsy they'll know what killed me. I've decided to stop breathing, it's too painful. I'm not getting any oxygen anyway. If I need air, I'll just suck it in through the 4-inch hole in my stomach.

Chili # 8: Helen's Mount Saint Chili

JUDGE ONE: A perfect ending, this is a nice blend chili, safe for all, not too bold but spicy enough to declare its existence.
JUDGE TWO: This final entry is a good, balanced chili, neither mild nor hot. Sorry to see that most of it was lost when Judge Number 3 passed out, fell and pulled the chili pot on top of himself. Not sure if he's going to make. Poor Yank.
CHIRP: --------------(editor's note: Judge #3 was unable to report)"

And he has the guts to challenge people to contests?
I hope this helps to put CHIRP in proper light.
(With apology to original writer.)

bada BUm

2782. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921172151.16197.00000139@ng-cg1.aol.com>
Source record: 179934

```
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921150529.26895.00000143@ng-md1.aol.com...
>>
>> All random shaped ones are.
>>
>>
>> >Actually, randomly shaped antennas are not fractals.
>> >
>>
>> Yes they are. You do not understand fractals if you say this.
>>
>>
>
>I don't have any time for "yes they are! No their not" We disagree, so
>what.

A scientist would never say that. Only someone lacking in information could say
that.

>
>> >>which has similar but
>> >> not better performance FOM than the MI2 I have previously published.
>> >>
>> >
>> >I never said it had to be better. I simply claimed that a random
>geometry
>> >would provide similar performance.
>> >
>>
>> Well, show me. Provide the file you publicly offered to provide.
>>
>
>I asked you to send me your MI2 eznec file two weeks ago. Did you send it?
>

I have no such request. As I have said many times in the last 2 years, such
offers must come from members of the fractal antenna reflector. You are welcome
to join. I will honor your request, as I have many,many, others over the years.

OTOH, your offer was posed publicly on this NG. Kindly provide the file , and
many thanks!

>>
>> Don't have to. However, if you are of the opinion that all loops of a
>given
```

>> length of wire can produce oodles and oodles of antennas with the same
>> resonance and efficiency and gain and directivity, then you are wrong. It
>> would make an interesting paper though. Why don't you publish it and then
>> others can publish papers showing your errors.
>>
>> Last year there was a paper on meander loading which made outrageous
>claims on
>> efficiency (in Transactions) that even we on this NG showed to be wrong.
>So I
>> guess there is room for false assertions.
>>
>>
>> >> The entire point of the FRACTAL ANTENNA CHALLENGE is to find a better
>> >> performer. You tried, and failed, but you learned a lot about the
>benefits
>> >of
>> >> fractal antennas and that is a very,very good thing.
>> >>
>> >
>> >Actually, I think the Fractal Challenge is part of an ongoing effort of
>self
>> >promotion (my personal opinion, no offence intended).
>>
>> I do take offense. If this is the case, then to what end is such
>self-promotion
>> done?
>> So that I can have W8JI threaten to kill me?
>>
>>
>> I think you expected
>> >no one to really come up with a design that was even close.
>> >
>>
>> Steve, I founded fractal element design 12 years ago. I've seen it all. It
> may
>> be new to you, but I've been around the corner a few times.
>>
>> Close isn't better, is it?
>
>You have seen it all?? Think about someone actually believing this of
>themselves.

I would say that I am about 5-9 years ahead of others on this topic. From an IP standpoint I am ahead of everyone. And will be for many, many,many years:-)

I can't tell you how many times Bob Hohlfeld and I have listened to other fractal antenna talks and I said :' Bob, what year was that, 93? 95?' It's fun seeing others re-discover. But as it stands there are, oh, a couple (maybe 3)f 'hot topics' left in my opinion ,and these are HARD.

The cream was skimmed a long time ago.

>
>>
>> You said you had a spiral for 14 Megs that was 5 inches in size. Tell us
>about
>> it.
>>
>
>I never said I has a spiral. Do you actually read anything?

Yes.That's what you said in the context of the FRACTAL ANTENNA CHALLENGE. Want
a re-post?

I said I had a
>helically wound loop and the helix section was 5 inches in diameter and the
>total wire length was 1.5 wavelengths. I am not sure what your motive is in
>continualy misrepresenting my statements. I have corrected you several
>times. The file has 500+ segments. When I get EZNEC Pro, I will run it.
>

I don't know why. . . .

5 inches in diameter!

** Yow! **

**What IS this...an IRRIGATION SYSTEM?? A SCULPTURE?? A SKY ANCHOR FOR ROSWELL
RODS?? **

Not only is that a 3D form factor, but an untenable one at that!! No; I guess
I'm NOT interested...who would be?! The weight alone would be prohibitive! Let
alone the mutual coupling at the corners...

Can you imagine going to a customer and saying: I has this wonderful wire-wound
loop on expensive substrate that works as well as a dipole--but is 1/8 wave in
size! It will only cost you 89 clopniks! Then the customer says:'But Fractal
has this flat fractal loop on paper thin substrate for 1/2 clopniks and it
works better'.

Ouch!!!!!!!!!!!!!

>In the meantime, I have no interest in getting sucked into a foolish round
>of posts back and forth like this is starting to turn into. My random
>geometry works the same as the MI2 Fractal - deal with it.
>

That has yet to be seen. So, show me. I will then confirm or disprove, and then
expand on your (incorrect) assertion that it is merely x,y axis symmetry and
wire length that produces such a small, high efficiency, dipole-like antenna.

I am neither inhibited in praise nor critique.

BTW, would you kindly explain WHY you read the rules of the FRACTAL ANTENNA
CHALLENGE, and then misled us into thinking you had something better, when
actually it is a 3D antenna--with 5 inch diameter tubular structure!

Man o man! I am truly blown away!

What a giant step backwards in antenna design!

Ready for the file, as per your offer.

Best,
Chip N1IR

>73,
>Steve

2783. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921172358.16197.00000140@ng-cg1.aol.com>
Source record: 179935

>Hi Ed--
>
>>Fractenna's repeated disruptions of this NG did seem to manage to accomplish
>his purpose here -- to be disruptive.<
>
>You may not wish to call Dr. Cohen's actions disruptive and offend him. I
>understand he may be negotiating with Mark Wilson to author a fractal article
>for QEX.
>
>Rick K1BQT
>

Yes Rick, that is true after a fashion. But I am quite content not to pursue it; what do I have to lose? If asked nicely, in the proper way, I will respond by volunteering my time in writing such an article.

BTW, THIS THREAD IS CLOSED.

NC

2784. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <8bvy5.725$u95.2380956@news.ntplx.net>
Source record: 179936

<klocko@toad.net> wrote:

> This is really a question of definition. In the previous post, gain was
> defined as the directivity times the efficiency. The gain, whatever it
> is, is always less than the directivity. It may not be correct to say
> that an antenna with a "gain" of -23 dBi actually has gain, but that's
> what it's called. (Can you imagine the confusion in saying the antenna
> has a loss value of 23 dBi?). My quibble was with the statement that
> including ohmic loss results in a directivity. It results in a gain.
> There also may be other losses, such as ground losses, etc. that further
> reduce the gain. 73,

I see nothing in the directivity definitions that stipulate that directivity applies only to free space. One can equally determine the directivity or gain of an antenna over real ground. In those cases, any losses, including the ground loss, would NOT be part of the directivity of the antenna but would be part of the gain.

The formula for directivity is:

D = P / Psubav, where D is the directivity, P is the power density at its maximum point on the surface of the sphere and Psubav is the average power density.

The formula for gain is G = k * D, where k is the efficiency of the antenna, ie power radiated divided by the power input to the antenna. IMHO, one must generally include ground losses and, under some circumstances, other site losses.

In most amateur practice, G ~= D.

This is discussed in the ARRL Antenna Book, among other antenna theory books.

73,
Ed Hare, W1RFI

2785. WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921173847.16176.00000148@ng-cg1.aol.com>
Source record: 179937

This has got to be one of the most interesting antennae I have ever heard of!

Take 9 feet on a side of form factor, then compose a square from it. On each side of the square, take some kind of PVC pipe (anyone have a better suggestion?) about **5 inches** in diameter and wrap wire around it. Do this to the 4 sides and attach as a closed loop.

Hey! A nifty small-sized 20M quad loop element!

Advantages:

*Stable! With this much weight, if you can get it in the air, then nothing can get it down (or turn it!!)

* Prominent! Your neighbors will admire the plumbing statue you have erected.

* Charismatic! Just explain that it is a new religious symbol and your house is where it all started!

* White! Brite! Catches the morning sun with that lovely snowy glow and highlight!

* Utilitarian! Explain that its a framework for a new donut shop sign to be erected soon, or the return of Burma Shave iungles.

If you want to make a STATEMENT beyond just getting out a 20M signal, this is the way to go!

Steve, VE9SRB, has the plans. Just ask him today!

73
Chip N1IR

2786. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000921174502.13529.00000065@ng-cf1.aol.com>
Source record: 179938

>We really want to know:-)
>
>73
>Chip N1IR

WE ? You got a mouse in your pocket ?

2787. 2 MTR TWINLEAD J-POLE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1ksz@tiac.net
Message-ID: <39ca80fc.1063554@news.tiac.net>
Source record: 179939

I picked up what looks like a 2 Meter J-Pole antenna. It is
about 20 feet of RG-58 to a Black cylindrical "Balun" to
about 5 feet of Twinlead. The twinlead has a breal in one side
about a foot up and the end of the twinlead is shorted, with a
nylon loop for hanging up on something. The "Balun" is marked
"Radio Engineers".
Anyone ever see one of these ? Who made it ?

Tnx es 73, Dick, W1KSZ

2788. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921174653.16197.00000148@ng-cg1.aol.com>
Source record: 179940

>
>>We really want to know:-)
>>
>>73
>>Chip N1IR
>
>
>WE ? You got a mouse in your pocket ?
>

Nope. It's attached to my PC and it don't eat cheese!

73
Chip N1IR

2789. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Mnvy5.727$u95.2381786@news.ntplx.net>
Source record: 179941

VE9SRB <srbest@worldnet.att.net> wrote:

> Thanks for the offer. I am arranging to get a copy of EZNEC from Roy.
When
> I do I will run the antennas and compare performance with a reasonable
wire
> size/loss. I will post results and provide files to anyone interested.

You will like EZNEC better than NEC. It is a LOT more user friendly. :-)
If memory serves, you can pay your money with a credit card and download it
from his site, so you could be up and running very quickly.

> The randomness of which I speak is in regards to the shape of the antenna.
> I modeled the performance of the MI2 Fractal Loop as a baseline. Then,
> using the same total wire length as in the MI2 I created a random shape
within the same
> physical aperture as the MI2. The performance characteristics of both
> antennas are essentially the same.

First, of course, this is a sample of one, so I don't think we can draw any
firm conclusions from your work yet. And, as Chip points out, your model did
not include the ohmic losses of the wire, although that is probably not a
major factor. Did you compare the currents on each of the segments from one
antenna to the other? If the currents are pretty much the same, then the
ohmic losses will probably be relatively unimportant. But you never know,
and including the losses would be the best science, so I would hope to see
it done at some point.

As an experienced antenna designer, I am sure you are aware that the
performance characteristics of an antenna include gain, F/B, SWR bandwidth
and other bandwidth related factors such as how the F/B varies across the
usuable bandwidth, etc. The latter may very well be the major difference;
the 25 dB model that Chip posts on his web site looks pretty good for a
2-element quad, so I would like to see how it compares between the fractal
and random designs and now it varies with frequency between the fractal and
random designs.

Were you serious about publishing the results in the IEEE antenna
transactions journal? If so, perhaps the fractal vs 4 random designs, with
lots of graphs, would be adquate. I believe their journal is peer reviewed,
so the science should be as rigorous as possible or it will probably be
rejected.

I look forward to your work and any references to any theoretical treatment
(by you or others) that might explain the theoretical reasons a fractal
design would be superior to randomly chosen configurations. (Chip, I lost

the reference to the paper by Cohen and ? that you posted. If there is a URL for it, can you repost or email to me at my AOL address?

73,
Ed Hare, W1RFI

2790. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921175014.16158.00000232@ng-cg1.aol.com>
Source record: 179942

>I would like to see it compared to other similar handicapped antenna

WHAT handicap??

at the
>antenna test range done by any VHF antenna measuring contest/conference.
>The REAL comparisson vs. scientwisting baloney propaganda.
>

Well, after you admitted you are God's Gift to contesting, I'm sure that
important statement needs ample consideration.

(I remind you that I cordially challenge you in the 10M Contest.)

But why an antenna at VHF? Seems to me the greater need is at HF.

73
Chip N1IR

>Yuri, VE1BY
>
>
>
>
>
>

2791. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000921175116.13121.00000093@ng-ci1.aol.com>
Source record: 179943

All newsgroup members are directed to Lance Morrow's commentary on page 22 of the September 25th issue of Time Magazine. It profiles a particularly familiar type of internet behavior and is entitled, "Every Man a Blowhard".

Rick K1BQT

2792. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Lvvy5.728$u95.2380160@news.ntplx.net>
Source record: 179944

sideband <sideband@cac.net> wrote:

> The point is that the data that has been presented by NC/Chip/Phil/Dr
> Nathan Cohen PhD/et al is only, to use your words, a first
> approximation. There is alot more data that could be presented that
> would give us a better idea of the antenna's performance than the
> little bit that has been allowed out.

The performance data, while it could be more complete, is a bit more than most antenna manfacturers offer, so do see it in that perspective. I think what you have been asking for is more theory about the concept of fractal design and just how it functions.

> I also agree that 3 dBd is an improvement over a dipole, and the F/B
> has merit as well. The problem, and the reason I've asked for a
> comparison between the FQY and any other Yagi, is that the F/B data,
> and the side and rear rejection data is not apparent. There is no way
> for us to extrapolate that data from a dipole:FQY comparison.

I am confused. Fractennas published data includes a radiation plot of his fractal antenna. This could be very easily compared against other published radiation plots, or those derived by modeling. Just because he chooses not to publish the plots of Yagis, for example, does not mean that the comparision you seek cannot be easily done -- by you, of course. :-)

73,
Ed Hare, W1RFI

2793. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921175929.16158.00000236@ng-cg1.aol.com>
Source record: 179945

>Would you expect Michael Johnson go and play seriously against school kids?
>Hmmmm? It would be below his dignity.

Michael Jordan has skill and he proves it every time he plays.

What you do is press a voice keyer, look at CT, press a function on your keyboard, turn a knob, and occasionally blurb something into a microphone. Some skill!

IF you run like MOST so-called 'contest stations', you are using power exceeding legal limits for your respective country; splitting the feed with multiple amplifiers to point at more than one direction at once (also illegal)with multiple antennae; and jumping on top of others at any cost to get multipliers. That's for starters.

I do none of these things--although this year I WILL use my first voice keyer and computer log.

I will beat you hands down in the LP phone category because I know how to lust for, and grab those contacts and how to use the best antenna for my situation. Just ONE I might add...

73
Chip N1IR

2794. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921180053.16158.00000238@ng-cg1.aol.com>
Source record: 179946

>All newsgroup members are directed to Lance Morrow's commentary on page 22 of
>the September 25th issue of Time Magazine. It profiles a particularly
>familiar
> type of internet behavior and is entitled, "Every Man a Blowhard".
>
>Rick K1BQT

You made the bigTIME!

Cool!

73
Chip N1IR

2795. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <ssl1mnf829e741@corp.supernews.com>
Source record: 179947

In <20000921173847.16176.00000148@ng-cg1.aol.com>, fractenna@aol.com (Fractenna) writes:

>This has got to be one of the most interesting antennae I have ever heard of!

> Take 9 feet on a side of form factor, then compose a square from it. On each
>side of the square, take some kind of PVC pipe (anyone have a better
>suggestion?) about **5 inches** in diameter and wrap wire around it. Do this
>to the 4 sides and attach as a closed loop.
>
>Hey! A nifty small-sized 20M quad loop element!

Beware ... Byrnum Woods may be marching on Dunkirk Castle! Chuckle.
May not be so these days, but long ago and far away I tried PVC pipe for
a 40 meter shortened antenna like this! Surprise! Le' PVC, he gettum
hot with my KW source! Dunno if same story now, but -- some -- forms of
good old PVC aren't so swift as a coil form! They soak up RF .. or at
least that is what I found out back then!

When I mentioned this long ago and far away in the FidoNet ham readio
echo, pre-Internet, the conclusion was test the PVC before you do the
job! One poster said you could put it in a microwave oven and if it got
hot you had your answer, but I never tried it in my original Amana Radar
Range!

I simply abandoned the idea of PVC as the form and forgot the idea...
Maybe is not true any longer, but someone here who has more recent
knowledge will be sure to correct me if I'm off base! ;)

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

2796. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CA86A5.C71E883C@oio.net>
Source record: 179948

Fractenna wrote:
>
> This has got to be one of the most interesting antennae I have ever heard of!
>
> Take 9 feet on a side of form factor, then compose a square from it. On each
> side of the square, take some kind of PVC pipe (anyone have a better
> suggestion?) about **5 inches** in diameter and wrap wire around it. Do this
> to the 4 sides and attach as a closed loop.
>
> Hey! A nifty small-sized 20M quad loop element!
>
> Advantages:
>
> *Stable! With this much weight, if you can get it in the air, then nothing can
> get it down (or turn it!!)
>
> * Prominent! Your neighbors will admire the plumbing statue you have erected.
>
> * Charismatic! Just explain that it is a new religious symbol and your house is
> where it all started!
>
> * White! Brite! Catches the morning sun with that lovely snowy glow and
> highlight!
>
> * Utilitarian! Explain that its a framework for a new donut shop sign to be
> erected soon, or the return of Burma Shave iungles.
>
> If you want to make a STATEMENT beyond just getting out a 20M signal, this is
> the way to go!
>
> Steve, VE9SRB, has the plans. Just ask him today!
>
> 73
> Chip N1IR

Now. List the disadvantages.
'Doc

2797. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <KLvy5.729$u95.2383063@news.ntplx.net>
Source record: 179949

Yuri Blanarovich <k3bu@aol.com> wrote:

> I would like to see it compared to other similar handicapped antenna at the
> antenna test range done by any VHF antenna measuring contest/conference.
> The REAL comparisson vs. scientwisting baloney propaganda.

I would wager that 99% of the antennas that have been published in ARRL publications have not been so tested. The claim of 3 dBd gain appears reasonable; on what basis would you suggest that anything past NEC-4 modeling would be required? Like all antenans, the fractal quad has its advantages and disadvantages, and, like most antennas, most of those are in the eyes of the beholder.

Now, if your really want to see it compared to a similar antenna at one of the VHF antenna contests, build a 2M or 6M version and submit it. I am sure that this NG, and certainly including Chip, will be interested in the results. But I would disagree that such measurments need be made before publication in QEX.

Now, I don't know that claims that Chip will make in that article vis a vis the fractal design, but even if it were demonstrable that a "random" design of similar size could have reasonably equal performance, the design I saw on Fractenna's web page offered some mechanical advantages that would make it worthwhile. QEX is intended to publish articles that encourage experimentation, and the fractal quad certainly qualifies as an experimentation opportunity. Maybe the QEX article could contain some of that theoretical treatment we have been all hoping to see. To survive the peer review that Chip said he would like to see, the article would certainly have to have a supportable explanation of how it works.

I look forward to seeing it, Chip. Having been involved in some of these discussions, I will offer to Doug that I would like to offer my input.

73,
Ed Hare, W1RFI

2798. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <2Pvy5.851$6T.73627@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179950

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921172151.16197.00000139@ng-cg1.aol.com...
> >
> >
> >I don't have any time for "yes they are! No their not" We disagree, so
> >what.
>
> A scientist would never say that. Only someone lacking in information
could say
> that.
>

Read the sentence above and then read the rest of your post. Your comments
are undeserving of a response.

Steve

> >
> >> >>which has similar but
> >> >> not better performance FOM than the MI2 I have previously published.
> >> >>
> >> >
> >> >I never said it had to be better. I simply claimed that a random
> >geometry
> >> >would provide similar performance.
> >> >
> >>
> >> Well, show me. Provide the file you publicly offered to provide.
> >>
> >
> >I asked you to send me your MI2 eznec file two weeks ago. Did you send
it?
> >
>
>
> I have no such request. As I have said many times in the last 2 years,
such
> offers must come from members of the fractal antenna reflector. You are
welcome
> to join. I will honor your request, as I have many,many, others over the
years.
>
> OTOH, your offer was posed publicly on this NG. Kindly provide the file ,
and
> many thanks!

>
>
> >>
> >> Don't have to. However, if you are of the opinion that all loops of a
> >given
> >> length of wire can produce oodles and oodles of antennas with the same
> >> resonance and efficiency and gain and directivity, then you are wrong.
It
> >> would make an interesting paper though. Why don't you publish it and
then
> >> others can publish papers showing your errors.
> >>
> >> Last year there was a paper on meander loading which made outrageous
> >claims on
> >> efficiency (in Transactions) that even we on this NG showed to be
wrong.
> >So I
> >> guess there is room for false assertions.
> >>
> >>
> >> >> The entire point of the FRACTAL ANTENNA CHALLENGE is to find a
better
> >> >> performer. You tried, and failed, but you learned a lot about the
> >benefits
> >> >of
> >> >> fractal antennas and that is a very,very good thing.
> >> >>
> >> >
> >> >Actually, I think the Fractal Challenge is part of an ongoing effort
of
> >self
> >> >promotion (my personal opinion, no offence intended).
> >>
> >> I do take offense. If this is the case, then to what end is such
> >self-promotion
> >> done?
> >> So that I can have W8JI threaten to kill me?
> >>
> >>
> >> I think you expected
> >> >no one to really come up with a design that was even close.
> >> >
> >>
> >> Steve, I founded fractal element design 12 years ago. I've seen it all.
It
> > may
> >> be new to you, but I've been around the corner a few times.
> >>
> >> Close isn't better, is it?
> >

> >You have seen it all?? Think about someone actually believing this of
> >themselves.
>
> I would say that I am about 5-9 years ahead of others on this topic. From
an IP
> standpoint I am ahead of everyone. And will be for many, many,many
years:-)
>
> I can't tell you how many times Bob Hohlfeld and I have listened to other
> fractal antenna talks and I said :' Bob, what year was that, 93? 95?'
It's fun
> seeing others re-discover. But as it stands there are, oh, a couple (maybe
3)f
> 'hot topics' left in my opinion ,and these are HARD.
>
> The cream was skimmed a long time ago.
>
>
> >
> >>
> >> You said you had a spiral for 14 Megs that was 5 inches in size. Tell
us
> >about
> >> it.
> >>
> >
> >I never said I has a spiral. Do you actually read anything?
>
> Yes.That's what you said in the context of the FRACTAL ANTENNA CHALLENGE.
Want
> a re-post?
>
> I said I had a
> >helically wound loop and the helix section was 5 inches in diameter and
the
> >total wire length was 1.5 wavelengths. I am not sure what your motive is
in
> >continualy misrepresenting my statements. I have corrected you several
> >times. The file has 500+ segments. When I get EZNEC Pro, I will run it.
> >
>
> I don't know why. . . .
>
> **5 inches in diameter!**
>
> ** Yow! **
>
>
> **What IS this...an IRRIGATION SYSTEM?? A SCULPTURE?? A SKY ANCHOR FOR
ROSWELL

> RODS?? **
>
> Not only is that a 3D form factor, but an untenable one at that!! No; I
guess
> I'm NOT interested...who would be?! The weight alone would be prohibitive!
Let
> alone the mutual coupling at the corners...
>
> Can you imagine going to a customer and saying: I has this wonderful
wire-wound
> loop on expensive substrate that works as well as a dipole--but is 1/8
wave in
> size! It will only cost you 89 clopniks! Then the customer says:'But
Fractal
> has this flat fractal loop on paper thin substrate for 1/2 clopniks and it
> works better'.
>
> Ouch!!!!!!!!!!!!!
>
>
> >In the meantime, I have no interest in getting sucked into a foolish
round
> >of posts back and forth like this is starting to turn into. My random
> >geometry works the same as the MI2 Fractal - deal with it.
> >
>
> That has yet to be seen. So, show me. I will then confirm or disprove, and
then
> expand on your (incorrect) assertion that it is merely x,y axis symmetry
and
> wire length that produces such a small, high efficiency, dipole-like
antenna.
>
> I am neither inhibited in praise nor critique.
>
> BTW, would you kindly explain WHY you read the rules of the FRACTAL
ANTENNA
> CHALLENGE, and then misled us into thinking you had something better, when
> actually it is a 3D antenna--with 5 inch diameter tubular structure!
>
> Man o man! I am truly blown away!
>
> What a giant step backwards in antenna design!
>
> Ready for the file, as per your offer.
>
> Best,
> Chip N1IR
>
> >73,

> >Steve
>

2799. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39CA880D.C2688F9@uci.edu>
Source record: 179951

Fractenna wrote:
> BTW, THIS THREAD IS CLOSED.
>
> NC

Is a closed thread anything like a closed loop? Sure seems like it.

xg

2800. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <eVvy5.730$u95.2383744@news.ntplx.net>
Source record: 179952

RanHefner <ranhefner@my-deja.com> wrote:

> > I would prefer that peer review be anonymous.

> Why? Because the "peers" you hand-pick would be concealed?

If Chip would use the same process to write his article as I use for mine, he will send a copy to his "hand picked" peers, who will give Chip feedback that will make his article more accurate and useful. An author would generally do that anonymously in that he would not air each comment received from each reviewer, although a good author will have an acknowledgment paragraph. The ARRL editorial staff often sends articles out for review by knowledgeable outside experts in a particular subject and ARRL does not air each comment received from each reviewer. Is this "concealed?" Was it "concealed" when I did this in conjuction with many of my articles and books?

What will really count is that the end result will be better for the additional input. I appreciate Chip's willingness to seek the input of other antenna professionals.

73,
Ed Hare, W1RFI

2801. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <RXvy5.731$u95.2383846@news.ntplx.net>
Source record: 179953

<sideband@mindspring.com> wrote:

> This thread is closed.

This NG will simply degenerate into uselessness if every one of us starts doing this.

At least put a smiley on it so we can all laugh a bit and move on. :-)

73,
Ed Hare, W1RFI

2802. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8qe3c5ck1@nnrp1.deja.com>
Source record: 179954

In article <8bvy5.725$u95.2380956@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> <klocko@toad.net> wrote:
>
> > This is really a question of definition. In the previous post, gain
was
> > defined as the directivity times the efficiency. The gain, whatever
it
> > is, is always less than the directivity. It may not be correct to
say
> > that an antenna with a "gain" of -23 dBi actually has gain, but
that's
> > what it's called. (Can you imagine the confusion in saying the
antenna
> > has a loss value of 23 dBi?). My quibble was with the statement that
> > including ohmic loss results in a directivity. It results in a gain.
> > There also may be other losses, such as ground losses, etc. that
further
> > reduce the gain. 73,
>
> I see nothing in the directivity definitions that stipulate that
directivity
> applies only to free space. One can equally determine the directivity
or
> gain of an antenna over real ground. In those cases, any losses,
including
> the ground loss, would NOT be part of the directivity of the antenna
but
> would be part of the gain.

Ed,
Please re-read what I said. You're confusing me with someone else. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2803. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CA8C75.3E53@wt.net>
Source record: 179955

mike.luther@ziplog.com wrote:

>
> Beware ... Byrnum Woods may be marching on Dunkirk Castle! Chuckle.
> May not be so these days, but long ago and far away I tried PVC pipe for
> a 40 meter shortened antenna like this! Surprise! Le' PVC, he gettum
> hot with my KW source! Dunno if same story now, but -- some -- forms of
> good old PVC aren't so swift as a coil form! They soak up RF .. or at
> least that is what I found out back then!
>
> When I mentioned this long ago and far away in the FidoNet ham readio
> echo, pre-Internet, the conclusion was test the PVC before you do the
> job! One poster said you could put it in a microwave oven and if it got
> hot you had your answer, but I never tried it in my original Amana Radar
> Range!
>
> I simply abandoned the idea of PVC as the form and forgot the idea...
> Maybe is not true any longer, but someone here who has more recent
> knowledge will be sure to correct me if I'm off base! ;)

I've heard of other cases of that. When I made coils for a 160 dipole I used pvc. Someone had mentioned somewhere to use the "grey" type pvc instead of the white, so I went with that. I gave it the microwave test, and it stayed cold. I don't know if using a lower frequency could be worse, but they seemed to do ok on that dipole, and I've also made 80m mobile coils from it for plastic bugcatcher use. Worked fine here, but only run 100w. I think a standard coil form would be better, but not very realistic to try to make something like that here. I don't have the tools needed. So I have to make do with the PVC. I've also used just plain plastic tubes, but never tested for heating. MK

--
http://web.wt.net/~nm5k

2804. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39cd8b72.11515678@news.seanet.com>
Source record: 179956

On Thu, 21 Sep 2000 22:18:38 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921172151.16197.00000139@ng-cg1.aol.com...
>> >
>> >
>> >I don't have any time for "yes they are! No their not" We disagree, so
>> >what.
>>
>> A scientist would never say that. Only someone lacking in information
>could say
>> that.
>>
>
>Read the sentence above and then read the rest of your post. Your comments
>are undeserving of a response.
>
>Steve
>

Hi Steve,

Hence the admonition :-)
DO NOT RESPOND TO TROLLS!

73's
Richard Clark, KB7QHC

2805. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39ca8645.322504734@news.azstarnet.com>
Source record: 179957

After a easily understood, non-threatening and well-thoughtout response by Roy,
On Thu, 21 Sep 2000 13:33:24 -0500, "William E. Sabin" <sabinw@mwci.net> wrote:

"What I don't see is the need for the pejorative rhetoric."

That makes two of us Bill. Why don't you take your own words, "This kind of
ridicule is not needed or deserved", to heart?

Both you and Roy are highly respected for your professionalism and expertise.
Surely you can discuss this without the mudslinging. And I'm standing pat on
that :)

Regards,

Wes

>
>
>Roy Lewallen wrote:
>
>> At the risk of opening this whole topic again, let me clarify what I
>> said.
>>
>> My statement was strictly in reference to the definition of the term
>> "dBd", and has nothing to do with the legitimacy or usefulness of
>> comparing antennas to dipoles. It is certainly legitimate and useful to
>> compare the gain of a Yagi at 60 feet with a dipole at 60 feet. The
>> danger is in simply referring to the Yagi's gain as "XX dBd", with "dBd"
>> meaning this gain ratio. There are too many people, like Ed, the ARRL,
>> and various other amateur publications that simply define dBd as being
>> 2.15 dBi. The result would be misinterpretation, to the tune of 5 - 6
>> dB, of what should be a valid comparison.
>>
>> It's also legitimate and useful to compare the free space gain of a Yagi
>> to the free space gain of a dipole, since both have similar elevation
>> patterns at low and moderate angles, and so will have similar relative
>> gains when both are elevated to the same height. Here, there's no
>> ambiguity.
>
>I am and always have been very much aware of all of this. I and a lot of others know
>the drill. What I don't see is the need for the pejorative rhetoric. I am standing pat
>on that.
>
>> I feel that people espousing both definitions of dBd were very short on
>> citations of its use, and made their points by being more loud than
>> convincing. And I stand firm in my conviction that whenever it's used,

>> there's a large amount of room for misinterpretation. The use of it you
>> just proposed is different from Ed's and the ARRL's definition and use,
>> which serves to illustrate the problem. There's no problem with using
>> the term, however, provided that you carefully state just what it means
>> each time you use it, as I suggested in my original posting.
>
>In the immortal words of John Gotti (behind bars) "It's all in the parameters. You got
>no parameters, you got nothin".
>
>> Roy Lewallen, W7EL
>>
>> "William E. Sabin" wrote:
>> >
>> > Roy Lewallen wrote:
>> >
>> > > A number of people have
>> > > argued long and loud on this newsgroup that dBd means "dB relative to a
>> > > dipole at some height over ground" rather than relative to a dipole in
>> > > free space. ARRL publications are among the very few which give an
>> > > explicit definition.
>> >
>> > The term dBd does have legitimate uses, if the scenario is defined, for example
>> > comparing a dipole at 60 feet with a 3 el Yagi at the same height and same
>> > location. Those who *suggest* this are not *proclaiming long and loud*. This kind
>> > of ridicule is not needed or deserved.
>> >
>> > Bill W0IYH
>
>Bill W0IYH
>

2806. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39ce8df6.12159874@news.seanet.com>
Source record: 179958

On Thu, 21 Sep 2000 15:13:33 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Fractenna wrote:
>> BTW, THIS THREAD IS CLOSED.
>>
>> NC
>
>Is a closed thread anything like a closed loop? Sure seems like it.
>
>xg

Hi Jim,

You are off topic if that loop is not confined to eighth wave
dimensions!

73's
Richard Clark, KB7QHC

2807. Re: Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CA8FA7.415A@wt.net>
Source record: 179959

Yuri Blanarovich wrote:

>
> And he has the guts to challenge people to contests?
> I hope this helps to put CHIRP in proper light.
> (With apology to original writer.)
>
> bada BUm

I almost wet my pants reading that one...But seriously that all stems from the lack of a suitable diet when a youngster. All Texans are fed the right beginning foods at an early age. No strained cabbage, carrots, beets for us. Nooooooooooooo....We start off right with this: http://web.wt.net/~nm5k/texbfood.jpg

MK
--
http://web.wt.net/~nm5k

2808. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_gwy5.1514$tl2.124082@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179960

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921173847.16176.00000148@ng-cg1.aol.com...
> This has got to be one of the most interesting antennae I have ever heard
of!
>
> 73
> Chip N1IR

Now I know why they call you a troll. I guess I really pushed the wrong
button presenting the non-fractal design (not the one Chip mentions here)
that meets the MI2 Loop performance.

Steve

2809. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Eiwy5.736$u95.2384934@news.ntplx.net>
Source record: 179961

VE9SRB <srbest@worldnet.att.net> wrote:

> I converted my NEC4 input files over to EZNEC and ran the calculations again
> so that I could provide gain numbers for both antennas.

> Results:
> MI2 Random
> Resonant Frequency: 15.15 MHz 14.83 MHz
> Resonant Resistance: 28 ohms 27 ohms
> Gain (Cu wire): 1.83 dBi 1.83 dBi

Chip's claim for his antenna in a recent post is:

> This antenna provides a unique combination of ease of construction, optimum
> performance, and dinky form factor. It is NOT MATCHED in performance,
> simplicty, and reliability by any other such small antenna in that form factor.
> None.

I think that his antenna has yours beat in "ease of construction," Steve, so if the gain is equal, his combination is still better than yours. I would find it easier to cut a mess of PVC to the same size and glue them all together than to cut them to random sizes.

73,
Ed Hare, W1RFI

2810. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qe3fo$m2e$1@neptunium.btinternet.com>
Source record: 179962

Dear Yuri, I don't think you've got the message yet - if there's any salty water around, just erect a vertical and call CQ contest.

Not even YOUR S-meter needle, plus a microscope, is sensitive enough to detect a difference of 1/500th of an S-unit between high and moderate water salinity.

Yuri, you leg puller. ;o)
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Yuri Blanarovich wrote

> >It's only about 1/500th of
> >an S-unit.
>
> ...and that's what I am looking for :-)
>
> Still looking for an answer, practical experiences.
>
> Yuri

2811. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39ca8cc6.324170155@news.azstarnet.com>
Source record: 179963

On 21 Sep 2000 21:14:30 GMT, k1bqt@aol.com (K1BQT) wrote:

>Hi Ed--
>
>>Fractenna's repeated disruptions of this NG did seem to manage to accomplish
>his purpose here -- to be disruptive.<
>
>You may not wish to call Dr. Cohen's actions disruptive and offend him. I
>understand he may be negotiating with Mark Wilson to author a fractal article
>for QEX.
>
>Rick K1BQT

Are they that desperate for material?

Maybe I'll offer up something on buried dummy loads. Low (really low) profile, compact, low cost, wife-approved, wide bandwidth, excellent SWR, easily meets the FCC field strength safety requirements.

Then for a follow-up article I'll show how to feed one with ladder line.

I love it... a whole new post-retirement writing career.

N7WS

2812. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ca936e.44593186@news.akorn.net>
Source record: 179964

On 21 Sep 2000 22:00:53 GMT, fractenna@aol.com (Fractenna) wrote:

>>All newsgroup members are directed to Lance Morrow's commentary on page 22 of
>>the September 25th issue of Time Magazine. It profiles a particularly
>>familiar
>> type of internet behavior and is entitled, "Every Man a Blowhard".
>>
>>Rick K1BQT
>
>
>You made the bigTIME!
>
>Cool!
>
>73
>Chip N1IR

Rick,

I believe Chip now owes you 100 dollars.

While you didn't name him in an insult, he directly named you as a
"blowhard".

Wasn't that the terms of your agreement?

73 Tom

2813. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ovwy5.1534$tl2.125921@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179965

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:Eiwy5.736$u95.2384934@news.ntplx.net...
> VE9SRB <srbest@worldnet.att.net> wrote:
>
> I think that his antenna has yours beat in "ease of construction," Steve,
so
> if the gain is equal, his combination is still better than yours. I would
> find it easier to cut a mess of PVC to the same size and glue them all
> together than to cut them to random sizes.
>
> 73,
> Ed Hare, W1RFI
>

Ed:

I assumed you looked at the EZNEC files - is this true?

With the MI2 loop, you would need to cut 100 sections. They may not all be the same size (I would need to see his model).

With mine you would need to cut 84 sections. They are not all the same length.

Now take a look at the number of wire bends if you were making either antenna out of a single piece of wire.

Also, ease of construction has not been my issue. The relative performance and the merits of the fractal geometry have been my issue. When I look at either antenna, I do not think either offer the claim of "ease of construction"

73,
Steve, VE9SRB

2814. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921190620.25790.00000249@ng-mg1.aol.com>
Source record: 179966

>On 21 Sep 2000 21:14:30 GMT, k1bqt@aol.com (K1BQT) wrote:
>
>>Hi Ed--
>>
>>>Fractenna's repeated disruptions of this NG did seem to manage to
>accomplish
>>his purpose here -- to be disruptive.<
>>
>>You may not wish to call Dr. Cohen's actions disruptive and offend him. I
>>understand he may be negotiating with Mark Wilson to author a fractal
>article
>>for QEX.
>>
>>Rick K1BQT
>
>Are they that desperate for material?
>
>Maybe I'll offer up something on buried dummy loads. Low (really low)
>profile,
>compact, low cost, wife-approved, wide bandwidth, excellent SWR, easily
>meets
>the FCC field strength safety requirements.
>
>Then for a follow-up article I'll show how to feed one with ladder line.
>
>I love it... a whole new post-retirement writing career.
>
>
>N7WS
>
>
>
>
>
>
>

This thread is closed.

NC

2815. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921190803.25790.00000250@ng-mg1.aol.com>
Source record: 179967

>
>After a easily understood, non-threatening and well-thoughtout response by
>Roy,
>On Thu, 21 Sep 2000 13:33:24 -0500, "William E. Sabin" <sabinw@mwci.net>
>wrote:
>
> "What I don't see is the need for the pejorative rhetoric."
>
>That makes two of us Bill. Why don't you take your own words, "This kind of
>ridicule is not needed or deserved", to heart?
>
>Both you and Roy are highly respected for your professionalism and expertise.
>Surely you can discuss this without the mudslinging. And I'm standing pat on
>that :)
>
>Regards,
>
>Wes
>
>>
>>
>>Roy Lewallen wrote:
>>
>>> At the risk of opening this whole topic again, let me clarify what I
>>> said.
>>>
>>> My statement was strictly in reference to the definition of the term
>>> "dBd", and has nothing to do with the legitimacy or usefulness of
>>> comparing antennas to dipoles. It is certainly legitimate and useful to
>>> compare the gain of a Yagi at 60 feet with a dipole at 60 feet. The
>>> danger is in simply referring to the Yagi's gain as "XX dBd", with "dBd"
>>> meaning this gain ratio. There are too many people, like Ed, the ARRL,
>>> and various other amateur publications that simply define dBd as being
>>> 2.15 dBi. The result would be misinterpretation, to the tune of 5 - 6
>>> dB, of what should be a valid comparison.
>>>
>>> It's also legitimate and useful to compare the free space gain of a Yagi
>>> to the free space gain of a dipole, since both have similar elevation
>>> patterns at low and moderate angles, and so will have similar relative
>>> gains when both are elevated to the same height. Here, there's no
>>> ambiguity.
>>
>>I am and always have been very much aware of all of this. I and a lot of
>others know

>>the drill. What I don't see is the need for the pejorative rhetoric. I am
>standing pat
>>on that.
>>
>>> I feel that people espousing both definitions of dBd were very short on
>>> citations of its use, and made their points by being more loud than
>>> convincing. And I stand firm in my conviction that whenever it's used,
>>> there's a large amount of room for misinterpretation. The use of it you
>>> just proposed is different from Ed's and the ARRL's definition and use,
>>> which serves to illustrate the problem. There's no problem with using
>>> the term, however, provided that you carefully state just what it means
>>> each time you use it, as I suggested in my original posting.
>>
>>In the immortal words of John Gotti (behind bars) "It's all in the
>parameters. You got
>>no parameters, you got nothin".
>>
>>> Roy Lewallen, W7EL
>>>
>>> "William E. Sabin" wrote:
>>> >
>>> > Roy Lewallen wrote:
>>> >
>>> > > A number of people have
>>> > > argued long and loud on this newsgroup that dBd means "dB relative to
>a
>>> > > dipole at some height over ground" rather than relative to a dipole in
>>> > > free space. ARRL publications are among the very few which give an
>>> > > explicit definition.
>>> >
>>> > The term dBd does have legitimate uses, if the scenario is defined, for
>example
>>> > comparing a dipole at 60 feet with a 3 el Yagi at the same height and
>same
>>> > location. Those who *suggest* this are not *proclaiming long and loud*.
>This kind
>>> > of ridicule is not needed or deserved.
>>> >
>>> > Bill W0IYH
>>
>>Bill W0IYH
>>
>
>
>
>
>

Bill's OK in my book, even on a rare off day.

73
Chip N1IR

2816. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CA958B.DDA21ADB@bellatlantic.net>
Source record: 179968

"Bullcrap" ?? You are the biggest author of bullcrap on this
ng. You do not have a *humble* opinion. You have the
unmitigated arrogance to deem something unworthy of this
ng?

The fact is, your mind is closed.

Fractenna wrote:

> >Fractenna,
> >
> >I posted two questions. By your reply, you have categorized
> >questions as "stupid idiotic crap". No one who categorizes
> >questions as "stupid idiotic crap" is helping hams out. Kudos,
> >like respect, are earned. Fractenna has done NOTHING on
> >this ng to earn either.
> >
> >I await Dino's answer to those questions.
> >
> >Fractenna wrote:
> >
> >> >Dino wrote:
> >> >
> >> >> Maybe not, but the antenna works...and you can't argue that.
> >> >
> >> >What makes you say the antenna "works", and what do you
> >> >mean by "works"?
> >> >
> >> >Have you used a 10 M - or other ham band - fractal antenna?
> >> >
> >> >> Dino
> >> >>
> >>
> >> Look at the ham page
> >>
> >> http://www.fractenna.com/ham/hampage1.html
> >>
> >> and be a goody dooby and tell us what is wrong or misleading or just plain
> >> inaccurate about the performance the relative advantages or anything else.
> >> Go ahead and do everyone a favor and tell them what is wrong.
> >>
> >> From what I've seen of other ham antenna web pages this is perhaps the best
> >> documented antenna from a performnace and modeling standpoint on the web.
> >>
> >> Dr. Cohen should be getting major kudos for helping hams out. Not stupid

> >> idiotic crap like this from a few jerks.
> >>
> >> Phil
> >> de N1ZKT
> >
>
> Fractenna is not a person.
>
> I don't agree with Phil's word choice, but your comments are not worthy of
> this NG IMHO.
>
> I know no one who has a fractal antenna who will now come on this NG. They
> have, rightly so, left it to me.
>
> They just don't want the bullcrap from a few malcontents.
>
> Don't blame'em.
>
> Chip N1IR

2817. HF9V Grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE7WVG@home.com
Message-ID: <39c94bdc.161049048@news.crdva1.bc.wave.home.com>
Source record: 180009

I have a couple of questions regarding grounding. I have read over all the threads regarding grounding in this forum and also my instruction manuals for my HF9V and CPK counterpoise kit.

I am mounting a HF9V on top of a 48 ft tower which I also have mounted a tri-band beam.

1stly, with the CPK counterpoise kit installed on my HF9V, should the antenna be insulated from the mast and tower seeing as I have the counterpoise kit installed and it is acting as an artificial ground, or should i also have my tower ground wires clamped to the mounting post or the shield side of the feedpoint of the HF9V?

2ndly, I have seen much talk of ground radial systems for grounding the HF9V when installed on the ground. However I am curious as to whether it matters if these ground radials are bare wire or insulated like any scrap household wire you may have lying around.

3rdly, Is it important as to what depth these ground radials be burried? I know most people put them 1" - 4" deep, but if they are deeper does it matter will performance suffer, high swr etc?.

4thly, does it matter what guage these wires are? Is thicker wire better than thinner wire?, I know more radials seem to be better than less, but what about the thickness of the radial wire?

Lastly, would a ground radial system be effective for an electrical ground of my tower. Are there advantages/dis-advantages to this sort of tower grounding or is it not at all necessary?

I am finding there is much to learn about grounding systems, and so far from what I have found, its pretty interesting stuff.

Please respond to this newsgroup so that others may learn as I am from reading the posts here, but an email reponse would be appreciated also:

73

Derek VE7WVG (VE7WVG@Home.Com)

2818. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920204220.18580.00000084@ng-cu1.aol.com>
Source record: 180010

>From: sideband@mindspring.com

>> This thread is closed.

>I re-open it. This thread is once again open for business.

Whew, and there for a minute, I thought I couldn't post to it any more. :-)

73,
Ed Hare, W1RFI

2819. FA: Wide-Band HT/Scanner Antenna...

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Bill Crocker <bcrocker@home.com>
Message-ID: <ZYcy5.1991$hD4.574373@news1.rdc1.mi.home.com>
Source record: 180011

For Auction on Ebay...

COMET CH-701X Miracle Boy II Wide-Band Antenna for HT, or Scanner Radio!
144MHz (2dBi gain), 430MHz (3.4dB), 900MHz (5.5dB), 10W, 50 ohms 18-3/4"
overall length, 11-3/4" from base is rigid, with remaining 7-1/4" flexible,
small loading coil in the middle. Standard BNC connector at base. This is
Brand New, cost $54.00!

About 25 minutes left, going at only $10.50 so far.

Click here:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=441456216

Thanks,
Bill Crocker

2820. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920210808.18580.00000096@ng-cu1.aol.com>
Source record: 180012

>From: "George, W5YR" w5yr@att.net

>But what if he references it to a real dipole near the ground? Which
>already has 5+ dbd? I think that this is the issue which was trampled
>here in excretia several months ago.

In general, if the antenna is horizontally polarized (I believe it is -- Chip?) and he references the antenna to a half-wave dipole at the same height, the answer will generally be pretty close to the answer he would get comparing his antenna in free space to a dipole in free space.

I think that the EZNEC model he shows on the Web page is of his antenna in free space (although he has not clarified that yet; he isn't talking to me) and that the dBd reference is probably to a dipole in free space.

>I have gotten the impression that comparisons were made and reported
>elsewhere between near-ground-mounted antennas but reported in terms of
>dbd and dbi without making it clear that the ground-enhanced gain had
>been accounted for.

Later in the page, he does reference his antenna over ground and compare it to a dipole at the same height, but the answer of 3 dB is about right for an antenna of that physical size and, although technically a misuse of dBd, it is not misleading, IMHO.

Now, this wouldn't necessarily apply to all antenna types. For example, a very low antenna, ie, <0.05 lambda, for example could show considerable variations between antenna types because of the interaction of the fields with lossy earth. A very small loop, if efficient, would probably come in near about 1.64 dBi in free space, compared to a dipole's 2.15 dB, but if those two antennas were very close to the ground, the small loop would lose gain faster the dipole because the loop has higher fields near the antenna.

>Ed, how about some Socratic wisdom in this area?

Far from Socratic; especially on this forum, I am more the student than the teacher. :-) I will gladly defer to those more wise than I. Besides, if I remember my history, Socrates and Aristotle got a lot of it wrong. :-)

73,
Ed Hare, W1RFI

2821. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8qbnpp$63s$1@nnrp1.deja.com>
Source record: 180013

In article <0YSx5.705$u95.2248226@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>
> Also, that dBi reference is for the gain of the antenna in situ; ie,
over
> ground, with any other attenuations factored (loss through buildings,
etc.)

Hi Ed,
Did you lose me in the noise? I'd like to keep the discussion going -
it's getting pretty interesting. See my reply to your post last night.
vy 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2822. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920211447.18580.00000097@ng-cu1.aol.com>
Source record: 180014

>From: sideband sideband@cac.net

> I'm wondering if he's ever had his antennas tested
>at a lab, a calibrated farm, or anything of the sort. I've asked
>before, and gotten no answers

In case you missed it, he did post the test conditions on another post in this thread:

> The FQY measurements on the ham page were done at WK1O's
>QTH. He has about an acre of clear, flat, marshy terrain.

Had I done the testing at that location and the results agreed pretty well with the modeling, I would feel comfortable with the result of 3 dBd. His page had given a measured 20 dB of F/B, in reasonable agreement with the model result he posted. I don't know how well that F/B will hold up across the band; in my modeling experience, small antennas have tended to be very sensitive for F/B across the usable SWR curve, but all in all, it does not look like a bad antenna to me.

73,
Ed Hare, W1RFI

2823. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8qbot7$7cd$1@nnrp1.deja.com>
Source record: 180015

In article <20000920050447.22365.00000113@ng-fc1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> Well Steve,
>
> You have me thoroughly confused.
>
> On (1), I do not know if your models are capable, or include, all components of
> ohmic loss. IMHO, you should run directivity CORRECTLY and include all
> components of ohmic loss Then you will actually have a directivity.

Actually, then you will actually have a gain. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2824. Re: G5RV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920213335.18580.00000106@ng-cu1.aol.com>
Source record: 180016

>From: "Barry D" x123x123@yahoo.com

>I have a G5RV antenna, and after reading the directions I cannot find a
>reference to which leg of the dipole gets attached to which connector on the
>balun. Does it matter which leg goes where?

Both legs of the flat-top on the G5RV are the same length, so it won't matter at all which leg goes to which output connector on the balun. The balun SHOULD be a 1:1, if I remember the G5RV design correctly. The balun is generally used where the coax joins the open-wire line section. A choke balun (current balun) would be the best choice.

73,
Ed Hare, W1RFI

2825. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000920213742.20927.00000084@ng-fe1.aol.com>
Source record: 180017

>
>It is the International SW broadcast transmitter for Radio Canada [aka CBC]
>located on the Tantramar Marshes on the ismuth leading into the main part of
>Nova Scotia. Perhaps you could write or contact the chief engineer at that
>transmitter site for some information on HF antenna performance over salt
>marshes.
>
> Peter K1PO
>

Thanks Peter,
I will try to dig out info on KO and WQAM.
I am familiar with CBC installation in Sackville, drove by it, took pictures, admired it and dreamed of firing it up in the contest. Appears that they have horizontal curtains. I didn't see any HF verticals ther. Will check it out.

73 Yuri

2826. Re: indoor dual band antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <39c96744@turakina.six.asn.au>
Source record: 180018

I originally did this when living in a flat. Mine was for two metres only though. It is exactly like the one described on the web page below EXCEPT I shorted the wires across the top. I am told this takes out some of the reactance in the match point and makes matching easier and more stable. Mine was not in a PVC pipe untill recently and I just hung it from a curtain when in the flat. This is a VERY portable antenna (you can roll it up and put it in your pocket for example).

It has handled more than 100W without showing any hassles for me - although the feedpoints are quite close.

I reckon the J-Pole is just about the best all purpose 2m antenna available. That it doesn't require a ground plane makes it ideal for many applications and it has a little more gain than a quarter wave ground plane (although gain may not be desirable in some circumstances - when working satellites for example)

I have since bought a house so I put it in a PVC pipe and it now hangs about 60' high in a gum tree. After reading the article on the web page you point to I tried it on 70cm and got an SWR of about 1.4:1 (I have about 3db cable loss though so the real SWR may be closer to 2:1).

michael hart

BB wrote in message <8q8aj0$4on$1@nnrp1.deja.com>...
>Hi,
> I am in a similar situation, but am on the top floor of my dorm. I
>went with a 300 ohm twin-lead j-pole inside of pvc and it works great.
>It is easy to get into the local repeaters and the swr is about 1.4 to
>1 on both bands with 10 watts, 1.2 to 1 with 5. Only bad part, if you
>don't have a air wound coil, it will get into the speakers of nearby
>radios. Currently it is hanging iverted infront of my window and nobody
>seems to care, they can't see it, hi. Here is a web-page to the plans,
>and everything should be available at the local hardware, except coax
>and connectors. These are the plans that I used.
>
>http://www.thedragonmaster.com/j-pole.html
>
>-73's- and good luck.
>Bill
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

2827. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000921115543.07000.00000038@ng-fy1.aol.com>
Source record: 180019

>I think 3dBd is probably a reasonable gain for any half-size antenna I guess there is so much noise accompanying the good data that it gets lost in the background. Thank's for reminding us Ed.<

Here's something else to consider. Most compacts are used in roof-top installations, so I personally believe weight becomes an extremely important design consideration. This only makes sense! The lighter you make 'em, the higher you can mount 'em using low-cost readily available TV hardware. And, the higher you can mount 'em, the better they work!

I've built and written up several feather-weight designs made specifically for roof-top installation over the years and never lost an element to wind or ice (a falling 3" tree limb took one out a couple years ago). Of course, the undisputed gold-medal winner in the bantam-weight catagory is Mike Traffe's rugged little 10-M monoband Hexbeam weighing a mere 12 ounces!

The salient point being, any compact antenna targeted for a roof-top installation probably requires special treatment that is different from what we'd give a full-sized yagi destined for installation on a 100-foot tower at a contest station.

The question is, if you fail to consider the application, or even fail to consider the antenna's weight at all, have you really completed your design? Food for thought (and it's almost lunch time!)

Rick K1BQT

2828. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Robert L. Spooner" <rls19@psu.edu>
Message-ID: <39CA2FA7.2D87C06F@psu.edu>
Source record: 180020

Walter,

When will the next edition of Reflections be available?

73,
Bob AD3K

Walter Maxwell wrote:
>
> My analysis of the double bazooka antenna appears in Chapter 18 of
> Reflections, which shows mathematically that the stubs contribute zilch to
> the bandwidth with respect to reducing the off-resonance reactance, but
> instead the bandwidth reduction is due entirely to the resistive losses in
> the coax.
...snip...
>
> Walt Maxwell, W2DU

--
Robert L. Spooner
Registered Professional Engineer
Associate Research Engineer
Intelligent Control Systems Department

Applied Research Laboratory Phone: (814) 863-4120
The Pennsylvania State University FAX: (814) 863-7841
P. O. Box 30
State College, PA 16804-0030 rls19@psu.edu

2829. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000921121354.07000.00000041@ng-fy1.aol.com>
Source record: 180021

>> I know no one who has a fractal antenna who will now come on this NG.<<

>They are all hanging around with CFA owners and users on rec. witchcraft. professional. voodooscience.<

Cummon Tom, knock it off! I have several fractal antennas that I've built and tested since 1996. They're all right here--under my porch. You won't find me hanging out with those CFA wackos!

73

Rick K1BQT

2830. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921123536.26564.00000542@ng-fi1.aol.com>
Source record: 180022

>>I think 3dBd is probably a reasonable gain for any half-size antenna I guess
>there is so much noise accompanying the good data that it gets lost in the
>background. Thank's for reminding us Ed.<
>
>Here's something else to consider. Most compacts are used in roof-top
>installations, so I personally believe weight becomes an extremely important
>design consideration. This only makes sense! The lighter you make 'em, the
>higher you can mount 'em using low-cost readily available TV hardware. And,
>the higher you can mount 'em, the better they work!
>
>I've built and written up several feather-weight designs made specifically
>for
>roof-top installation over the years and never lost an element to wind or ice
>(a falling 3" tree limb took one out a couple years ago). Of course, the
>undisputed gold-medal winner in the bantam-weight catagory is Mike Traffe's
>rugged little 10-M monoband Hexbeam weighing a mere 12 ounces!
>
>The salient point being, any compact antenna targeted for a roof-top
>installation probably requires special treatment that is different from what
>we'd give a full-sized yagi destined for installation on a 100-foot tower at
>a
>contest station.
>
>The question is, if you fail to consider the application, or even fail to
>consider the antenna's weight at all, have you really completed your design?
>Food for thought (and it's almost lunch time!)
>
>Rick K1BQT
>

Certainly plastic dowels Rick; I chose to use PVS because that's what people
like to use.

The antenna 's weight is in PVC. If , say (in this case) 8-9 lbs is too much
for an antenna that WITHSTOOD A TORNADO, then you provide a better one:-)

In that form factor too!

P.S> The hexbeam is 4 times the area...too big a turning radius. WOuldn't want
to upset my good neighbors with an OBVIOUS antenna!

73
Chip N1IR

P.P.S. How's that EIRP calculation goin'?

2831. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921123736.26564.00000543@ng-fi1.aol.com>
Source record: 180023

>In article <20000921105437.26631.00000010@ng-ch1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>>
>> I would prefer that peer review be anonymous.
>>
>> 73
>> Chip N1IR
>>
>
>Why? Because the "peers" you hand-pick would be concealed?
>
>--
>Randy A. Hefner
>http://talk.to/frs
>http://go.to/qx3
>http://come.to/funnynews
>
>

Explain.

I have no idea what you are talking about.

In fact, I get invitations to write articles/give professional talks all the time. On Monday, for example, I was invited to give a talk at a conference next summer. I said sure--as long as the MS is peer reviewed.

You have a problem with that Randy?

73
Chip N1IR

2832. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921123914.26564.00000544@ng-fi1.aol.com>
Source record: 180024

>
>>
>>All of that makes very little difference.
>>
>>73 Tom
>>
>>
>
>Ditto my experiences. I will second W8JI comments/findings, N1IR is off the
>rocker again with his unfounded statements.
>Go away super Troller!
>
>Yuri, K3BU

I can beat K3BU in a contest and have challenged him to do so. Why is he SCARED
to compete?

73
Chip N1IR

2833. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d631ec.142653755@news.seanet.com>
Source record: 180025

On Thu, 21 Sep 2000 14:03:38 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>Just to illustrate the point, I ran another arbitrary shape with the exact
>same wire length as the MI2 loop (actually it is 11 cm longer - slight
>mistake) and the exact same aperture size. Performance is as follows:
>
>1st Resonance: 15.389 MHz (MI2 is 15.749 Mhz)
>Resonant Resistance: 26.4 ohms (MI2 is 28.4 ohms)
>Directivity: 2.18 dBi (MI2 is 2.14 dBi)
>2:1 BW: 1.1% (MI2 is 1.27%)
>
>3rd Resonance: 27.863 MHz (MI2 is 28.65 Mhz)
>Resonant Resistance: 11.4 ohms (MI2 is 19 ohms)
>Directivity: 4.17 dBi (MI2 is 4 dBi)
>
>Not exactly the same but close enough from my perspective of determining the
>benefits of fractal geometry.
>
>> Is there yet another antenna: ''a "helically wound loop"? Did I miss this?
>I
>> hope you understand that this is not a 2 D form factor, and cannot meet
>the
>> rules of the fractal antenna challenge.
>>
>>73
>>Chip N1IR
>
>I really don't care about your fractal antenna challenge.
>
>73
>Steve, VE9SRB
>

Hi Steve,

I see you now fully perceive the small picture with your last
statement (one of the few to escape the tar-pits). The participants
lost in LaBrea are nameless, their contribution is buried in the
sludge of secrecy, and their hopes will be mired by a judge who is
also a beauty contestant. All in the name of keeping the fragile
participants safe from the corruption of this venue. Such posturing
and manufactured crisis from Fragile Antennas amounts to the squeals
of synthetic virtue.

I applaud your work and effort. Your experience of trying to discern the merit of fractal geometry is performed with the necessary methodical and patient examination. In most venues this is known as the "scientific" method - a bulwark being eroded in some schools it seems (its a shame we have students being taught by those who cannot spell - perhaps a new best selling book will appear "Why Teacher Can't Read").

I find your two examples of random designs matching claims of fractal designs not unfamiliar. I too attempted what I called my "Anti-Fractal," but was unable to worsen performance by dashing the fractal geometry against the wall. Perhaps I may publish that, but it does not serve any purpose beyond the observations already made by you.

I also found that simple deconstructions of fractals reveal characteristics very similar to the original designs. Hence, the notion that there is something inherently better about being "fractal" is simply that, a notion. I suppose academe can provide references and volumes of papers that prove otherwise (on the shelf in the library next to those studies that demonstrate bees can't fly).

I am sure that through the process of sifting candidates and constraining competition, that this so-called challenge will result in nothing remarkable. The process reveals that shallow agenda and is myopic to the larger world's view that it is the participants that bring credibility to an event - not the "award." Your participation in the "shadow challenge" has demonstrated far more credibility and it being ad hoc within an existing venue proves that free dialog and open communication is the value and reward.

Thanks for the positive and engaging writing you have offered following Roy's plea for you to stick around and participate. Your contributions have eclipsed those of the fractal variety.

73's
Richard Clark, KB7QHC

2834. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <15106-39CA3383-6@storefull-115.iap.bryant.webtv.net>
Source record: 180026

Yuri, K3BU wrote:
"I am after finding the "bestest" salt water conditioned ground and expanding on their work."

This has already been done by the FCC, which has published its results. Conductivity of seawater is considered near perfect and UNCHANGING at 5000 millimhos per meter. Other soil conductivities are considered less perfect and can undergo change, especially where the ground freezes during the winter.

It is not necessary to resonate a ground connection to the nearby sea. If the sea is near, it is necessary to have a good ground system for a permanent station the same as is used for inland sites. This standard radial system has so much soil cross-sectional area at its periphery that its resistance to the sea will be small. That is why you don`t see medium wave stations clustered at the seaside.

Best regards, Richard Harrison, KB5WZI

2835. Re: IDEAL ANTENNA,A MOVING TARGET!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <26ekssgpe7tqjes1k502op2v3is0l90f22@4ax.com>
Source record: 180027

On Sun, 10 Sep 2000 11:09:28 -0500, Arthur Unwin <aunwin@fgi.net> wrote:
>Having followed this antenna newsgroup for a few years
>I have never seen a discussion of what constitutes
>a good antenna. Isn,t that amasing?

The simple answer to that question is, "the antenna you're using
on the air." No antenna on the drawing board or in the shipping
carton is making as many contacts as the one you have actively
on the air. So put *something* up (everything works), and get on
the air. Any antenna you're using is better than one you're not.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2836. EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <c2ry5.57$0a1.2157@bgtnsc04-news.ops.worldnet.att.net>
Source record: 180028

"Fractenna" <fractenna@aol.com> wrote in message
news:20000920050447.22365.00000113@ng-fc1.aol.com...
>
> <snip>
>
> On (3),I suggest that you do, indeed, publish your random design--as any
small
> antenna --the MI2 a prime example-- with 1.9 dBi **directivity** and high
> efficiency is valuable. I do, however, have grave doubts that you have
such a
> design, based on your confusion between directivity and gain.
>
> I would like to give you an opportunity to recant your statement that you
have
> an "arbitrarily chosen random design". This is surely wrong. This says
that one
> may choose any other random design and attain the same result.
>
> <snip>
>
> 73
> Chip N1IR

I converted my NEC4 input files over to EZNEC and ran the calculations again so that I could provide gain numbers for both antennas. As stated above, Dr. Cohen does not believe the random geometry configuration that I came up with could be as efficient as the MI2 Fractal Loop.

Just to recap: One antenna is the MI2 Fractal Loop that Dr. Cohen described in the his Comm Quart articles. This is the same antenna identified in his $1000 Fractal Antenna Challenge thread. The second antenna is a random geometry (non-fractal) configuration that I believed would have similar performance characteristics as compared to the MI2 Fractal Loop. Note that both antennas have the same wire length and occupy the same physical aperture.

Results:
MI2 Random

Resonant Frequency: 15.15 MHz 14.83 MHz

Resonant Resistance: 28 ohms 27 ohms

Gain (Cu wire): 1.83 dBi 1.83 dBi

73,
Steve VE9SRB

2837. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921125346.22888.00000076@ng-fq1.aol.com>
Source record: 180029

>
>> Or is it just that you can't condescend to compete with someone who
>represents
>> a more realistic cross section of HF operators?
>>
>> Explain that (this should be juicy news going through the grapevine!)!
>>
>> We really want to know:-)
>>
>> 73
>> Chip N1IR
>
>
>SSB: This thread is closed.
>

Amen!

Would you expect Michael Johnson go and play seriously against school kids? Hmmmm? It would be below his dignity.

You want to play with big boys? Switch your SB220 to 110V, spread about 500 fractals around and see how far back you will end up.

This thread is considered useless troll and is closed.

Yuri, VA1A

2838. Re: Mixed Blessing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <2ufkssohpg3l06vhhkvc7adu78l5rcfbif@4ax.com>
Source record: 180030
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

On Sun, 10 Sep 2000 20:00:12 GMT, "VA3KC" <va3kc@home.com> wrote:
>I'm am recently the proud owner of a 70' free-standing tower and a Mosley
>Pro57B. I've been working up to this installation for years and I'm having
>a blast! Unfortunately, so are the local birds and my cedar deck is now
>covered in bird crap!
>
>I'd appreciate some helpful hints from anyone who has solved this problem!

The best solution I've found for this problem is to slip pieces of thin wall
poly pipe over the antenna elements. Bird lands, pipe rotates, bird falls off.
Funny as hell.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2839. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921130301.22888.00000078@ng-fq1.aol.com>
Source record: 180031

>But what's a difference in signal strength of
>0.0117 decibels between friends. It's only about 1/500th of
>an S-unit.

...and that's what I am looking for :-)

Still looking for an answer, practical experiences.

Yuri

2840. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921130338.26558.00000411@ng-fi1.aol.com>
Source record: 180032

>
>>
>>> Or is it just that you can't condescend to compete with someone who
>>represents
>>> a more realistic cross section of HF operators?
>>>
>>> Explain that (this should be juicy news going through the grapevine!)!
>>>
>>> We really want to know:-)
>>>
>>> 73
>>> Chip N1IR
>>
>>
>>SSB: This thread is closed.
>>
>
>Amen!
>
>Would you expect Michael Johnson go and play seriously against school kids?
>Hmmmm? It would be below his dignity.
>
>You want to play with big boys? Switch your SB220 to 110V, spread about 500
>fractals around and see how far back you will end up.
>
>This thread is considered useless troll and is closed.
>
>Yuri, VA1A

AHHH!!

So Yuri is...

CHICKEN:-)

If Yuri's station and operating skills are so superior, I fail to see why he
can't just beat me and win the class as well.

But he's JUST

CHICKEN!

73
Chip N1IR
(superior operator and setup than Yuri for LP phone only:-)

2841. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921130811.22888.00000079@ng-fq1.aol.com>
Source record: 180033

>
>I can beat K3BU in a contest and have challenged him to do so. Why is he
>SCARED
>to compete?
>
>73
>Chip N1IR
>
>
>
>

Not SCARED, below my dignity to lower myself to your level. GET IT?
You wanna compete with me? Get into the big league with real contesters.
That's where I QRV.
You can hook Phil at the other end of coax and freaktalize him.

Yuri, CG1ZZ

2842. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921130924.26558.00000414@ng-fi1.aol.com>
Source record: 180034

>> <snip>
>>
>> On (3),I suggest that you do, indeed, publish your random design--as any
>small
>> antenna --the MI2 a prime example-- with 1.9 dBi **directivity** and high
>> efficiency is valuable. I do, however, have grave doubts that you have
>such a
>> design, based on your confusion between directivity and gain.
>>
>> I would like to give you an opportunity to recant your statement that you
>have
>> an "arbitrarily chosen random design". This is surely wrong. This says
>that one
>> may choose any other random design and attain the same result.
>>
>> <snip>
>>
>> 73
>> Chip N1IR
>
>I converted my NEC4 input files over to EZNEC and ran the calculations again
>so that I could provide gain numbers for both antennas. As stated above,
>Dr. Cohen does not believe the random geometry configuration that I came up
>with could be as efficient as the MI2 Fractal Loop.
>
>Just to recap: One antenna is the MI2 Fractal Loop that Dr. Cohen described
>in the his Comm Quart articles. This is the same antenna identified in his
>$1000 Fractal Antenna Challenge thread. The second antenna is a random
>geometry (non-fractal) configuration that I believed would have similar
>performance characteristics as compared to the MI2 Fractal Loop. Note that
>both antennas have the same wire length and occupy the same physical
>aperture.
>
>Results:
> MI2 Random
>
>Resonant Frequency: 15.15 MHz 14.83 MHz
>
>Resonant Resistance: 28 ohms 27 ohms
>
>Gain (Cu wire): 1.83 dBi 1.83 dBi
>
>73,
>Steve VE9SRB

>

So, go publish it. If it's a RANDOM design, then it is a fractal one. Best case scenario is you have a fractal design equivalent to the MI2. But that is yet to be seen. SO publish it.

Remember: the objective of the FRACTAL CHALLENGE is to come up with something BETTER.

You haven't entered the FRACTAL ANTENNA CHALLENGE, presumably because you don't have a winner:-)

So far 10 entries have been received. Unfortunately no winners, at least yet.

Also, I notice that you fail to recant your statement about an ARBITRARY design.

I have already made over 100 designs in that form factor that my GA has ARBITRARILY chosen, that don't beat or are not as good as MI2.

Your isn't either--at least from what you claim here.

73
Chip N1IR

2843. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921131104.26558.00000415@ng-fi1.aol.com>
Source record: 180035

>Would you expect Michael Johnson go and play seriously against school kids?
>Hmmmm? It would be below his dignity.
>
>You want to play with big boys? Switch your SB220 to 110V, spread about 500
>fractals around and see how far back you will end up.
>
>This thread is considered useless troll and is closed.
>
>Yuri, VA1A
>

Watta joke!

You REALLY think you are Go'd gift to ham radio??

Man, that's not what other people think!

I'm sure glad you showed your true face though.

WHat an EGO!

And CHICKEN to compete to boot!

73
Chip N1IR

2844. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921131239.26558.00000418@ng-fi1.aol.com>
Source record: 180036

```
>
>>
>>I can beat K3BU in a contest and have challenged him to do so. Why is he
>>SCARED
>>to compete?
>>
>>73
>>Chip N1IR
>>
>>
>>
>>
>
>Not SCARED, below my dignity to lower myself to your level. GET IT?
>You wanna compete with me? Get into the big league with real contesters.
>That's where I QRV.
>You can hook Phil at the other end of coax and freaktalize him.
>
>Yuri, CG1ZZ
>

Just plain CHICKEN!

Or is your call... CH1CKN ???

LOL!!

Chip N1IR
Chip N1IR
```

2845. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921131713.22888.00000080@ng-fq1.aol.com>
Source record: 180037

>
>This has already been done by the FCC, which has published its results.
>Conductivity of seawater is considered near perfect and UNCHANGING at
>5000 millimhos per meter. Other soil conductivities are considered less
>perfect and can undergo change, especially where the ground freezes
>during the winter.
>
>Best regards, Richard Harrison, KB5WZI
>
>

Let me try again to paint better picture:
We are comparing ocean salt water vs. salt water marsh, where tide might fill some "lakes" in ground, tide goes out, water stays there, sun shines, water evaporates, salt concentration increases, "ground" gets more salty. Is it appreciably better than "regular" salt water? I am looking here at the far field ground, nothing to do with replacing radials with salt.
No concerns about winter, I am looking for ideal place for portable contest operation - trying to find where is the best RF ground and terrain.

K6SE operated one 160m contest from dried out salt lake in the west. Had good results.

Yuri

2846. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921132224.26906.00000115@ng-md1.aol.com>
Source record: 180038

>>Some people just have trouble dealing with *real* authority figures who
>>have a demonstrated track record for technical and professional
>>integrity.

That is my observation, but I stick it through anyway. Lots of people of here
read the mail without ever posting.

I try to help them when I can.

73
Chip N1IR

2847. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Rtry5.1064$tl2.93728@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180039

"Fractenna" <fractenna@aol.com> wrote in message
news:20000920050447.22365.00000113@ng-fc1.aol.com...
>
> Well Steve,
>
> You have me thoroughly confused.
>
> <snip>
>
> I would like to give you an opportunity to recant your statement that you
have
> an "arbitrarily chosen random design". This is surely wrong. This says
that one
> may choose any other random design and attain the same result.
>
> 73
> Chip N1IR

Chip:

I ran the two antennas through EZNEC so that I could present gain numbers
for you. Here's the comparison between the MI2 Fractal Loop and a random
geometry. Both have same wire length and aperture size.

MI2 Random

Resonant Frequency: 15.15 MHz 14.83 MHz

Resonant Resistance: 28 ohms 27 ohms

Gain (Cu wire): 1.83 dBi 1.83 dBi

Have a nice day.

73,
Steve VE9SRB

2848. Re: IDEAL ANTENNA,A MOVING TARGET!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921132407.22888.00000081@ng-fq1.aol.com>
Source record: 180040

>>Arthur Unwin <aunwin@fgi.net> wrote:
>>Having followed this antenna newsgroup for a few years
>>I have never seen a discussion of what constitutes
>>a good antenna. Isn,t that amasing?

Depends what are you after? Do you want to just drive to work, haul the ton of bricks, or race Ferraris?

Antenna has to satisfy the operator's requirements (propagation, location, purpose DX/contest/yak-yak), fit his budget, etc.
Antyhing radiates, from light bulb, through Fractals, tribanders, monobanders, killer arrays, Razors, ...?
It is as wide open question as "which car is the best."
More precise Q?

Yuri, K3BU

2849. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CA464E.8DA51BE@eznec.com>
Source record: 180041

At the risk of opening this whole topic again, let me clarify what I said.

My statement was strictly in reference to the definition of the term "dBd", and has nothing to do with the legitimacy or usefulness of comparing antennas to dipoles. It is certainly legitimate and useful to compare the gain of a Yagi at 60 feet with a dipole at 60 feet. The danger is in simply referring to the Yagi's gain as "XX dBd", with "dBd" meaning this gain ratio. There are too many people, like Ed, the ARRL, and various other amateur publications that simply define dBd as being 2.15 dBi. The result would be misinterpretation, to the tune of 5 - 6 dB, of what should be a valid comparison.

It's also legitimate and useful to compare the free space gain of a Yagi to the free space gain of a dipole, since both have similar elevation patterns at low and moderate angles, and so will have similar relative gains when both are elevated to the same height. Here, there's no ambiguity.

I feel that people espousing both definitions of dBd were very short on citations of its use, and made their points by being more loud than convincing. And I stand firm in my conviction that whenever it's used, there's a large amount of room for misinterpretation. The use of it you just proposed is different from Ed's and the ARRL's definition and use, which serves to illustrate the problem. There's no problem with using the term, however, provided that you carefully state just what it means each time you use it, as I suggested in my original posting.

Roy Lewallen, W7EL

"William E. Sabin" wrote:
>
> Roy Lewallen wrote:
>
> > A number of people have
> > argued long and loud on this newsgroup that dBd means "dB relative to a
> > dipole at some height over ground" rather than relative to a dipole in
> > free space. ARRL publications are among the very few which give an
> > explicit definition.
>
> The term dBd does have legitimate uses, if the scenario is defined, for example
> comparing a dipole at 60 feet with a 3 el Yagi at the same height and same
> location. Those who *suggest* this are not *proclaiming long and loud*. This kind
> of ridicule is not needed or deserved.
>
> Bill W0IYH

2850. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NFry5.1091$tl2.94055@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180042

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921130924.26558.00000414@ng-fi1.aol.com...
>
> So, go publish it. If it's a RANDOM design, then it is a fractal one. Best
case
> scenario is you have a fractal design equivalent to the MI2. But that is
yet to
> be seen. SO publish it.
>
> Remember: the objective of the FRACTAL CHALLENGE is to come up with
something
> BETTER.
>
> You haven't entered the FRACTAL ANTENNA CHALLENGE, presumably because you
don't
> have a winner:-)
>
> So far 10 entries have been received. Unfortunately no winners, at least
yet.
>
> Also, I notice that you fail to recant your statement about an ARBITRARY
> design.
>
> I have already made over 100 designs in that form factor that my GA has
> ARBITRARILY chosen, that don't beat or are not as good as MI2.
>
> Your isn't either--at least from what you claim here.
>
> 73
> Chip N1IR

Does this mean the thread is now closed?

2851. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8qdhua$a4j$1@nnrp1.deja.com>
Source record: 180043

You still didn't answer the question. WHY?

In article <20000921123736.26564.00000543@ng-fi1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> >In article <20000921105437.26631.00000010@ng-ch1.aol.com>,
> > fractenna@aol.com (Fractenna) wrote:
> >>
> >> I would prefer that peer review be anonymous.
> >>
> >> 73
> >> Chip N1IR
> >>
> >
> >Why? Because the "peers" you hand-pick would be concealed?
> >
> >--
> >Randy A. Hefner
> >http://talk.to/frs
> >http://go.to/qx3
> >http://come.to/funnynews
> >
> >
>
> Explain.
>
> I have no idea what you are talking about.
>
> In fact, I get invitations to write articles/give professional talks
all the
> time. On Monday, for example, I was invited to give a talk at a
conference next
> summer. I said sure--as long as the MS is peer reviewed.
>
> You have a problem with that Randy?
>
> 73
> Chip N1IR
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

2852. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CA494A.21EFB233@eznec.com>
Source record: 180044

At least one person has expressed that he was unclear on your use of
loss resistance, so please permit me to amplify what you said:

VE9SRB wrote:

[Very good, clear, fundamental information]

> . . .

> When the antenna structure has loss, our concern is really determining the
> antenna efficiency. We know that Ptotal = Pradiated + Ploss and the
> efficiency is simply Pradiated/Ptotal. Being consistent with our feedpoint
> definition of radiation resistance, Ptotal is the total power delivered to
> the feedpoint resistance, Pradiated is the power delivered to the feedpoint
> radiation resistance and Ploss is the power delivered to the feedpoint loss
> resistance.
> . . .

The key word here is the third from the end, "feedpoint". I'm pointing
it out because it might have gotten a little lost in that lengthy but
excellent presentation. When using the common equation Steve refers to,
it's essential that both the radiation and loss resistances be referred
to the same point. Failure to do this is the cause of mistaken claims
about folded monopole efficiency and the efficiency of other antennas.
Steve is, of course, doing it right, and in this case illustrating the
calculation with both quantities referred to the feedpoint, a common
procedure.

Roy Lewallen, W7EL

2853. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921134304.22888.00000083@ng-fq1.aol.com>
Source record: 180045

>
>Watta joke!
>
You are pathetic joke, and you still don't get it!

>You REALLY think you are Go'd gift to ham radio??
>
How did you freakin figure that one out Mr. ass. professor?

>Man, that's not what other people think!
>

I don't care what other people think, my results speak for themselves, I will not go force and sue people to think what I want them to think. Who is "other people"? You, phil, frak, frac, etc.?

>I'm sure glad you showed your true face though.
>

Now you can sleep well, and get the hell outa here!

>WHat an EGO!
>

Judging by yourself? Look in the mirror.

>And CHICKEN to compete to boot!
>
>73
>Chip N1IR
>
>
I have results to show, you got CHICKEN SH1T!
Why don't you turn you amp on and try to compete with big boys? Its only 10 dB difference. You wont make top 50! One think is yap, another thing is DO. We are sick of your yaping, time to grow up?

GB, SK, Amen, Tis tret is closet!

bada BUm

2854. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA46E0.E95133A8@mindspring.com>
Source record: 180046

Maybe he just doesn't like you enough to want to associate with you an any
way.

Fractenna wrote:

> >
> >>
> >>I can beat K3BU in a contest and have challenged him to do so. Why is he
> >>SCARED
> >>to compete?
> >>
> >>73
> >>Chip N1IR
> >>
> >>
> >>
> >>
> >
> >Not SCARED, below my dignity to lower myself to your level. GET IT?
> >You wanna compete with me? Get into the big league with real contesters.
> >That's where I QRV.
> >You can hook Phil at the other end of coax and freaktalize him.
> >
> >Yuri, CG1ZZ
> >
>
> Just plain CHICKEN!
>
> Or is your call... CH1CKN ???
>
> LOL!!
>
> Chip N1IR
> Chip N1IR

--
The preceding may or may not have been authored by myself but I offer it to
you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that
I refuse to use a
spell checker and don't take criticism well.

2855. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA490C.F34E5C69@mindspring.com>
Source record: 180047

Fractenna wrote:

> >In article <20000921105437.26631.00000010@ng-ch1.aol.com>,
> > fractenna@aol.com (Fractenna) wrote:
> >>
> >> I would prefer that peer review be anonymous.
> >>
> >> 73
> >> Chip N1IR
> >>
> >
> >Why? Because the "peers" you hand-pick would be concealed?
> >
> >--
> >Randy A. Hefner
> >http://talk.to/frs
> >http://go.to/qx3
> >http://come.to/funnynews
> >
> >
>
> Explain.
>
> I have no idea what you are talking about.

And that is why we laugh.

2856. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921140012.26918.00000097@ng-md1.aol.com>
Source record: 180048

>Does this mean the thread is now closed?

No; it does not refer to a time-specific event which ended last week.

I, for one, want you to explain what you mean by "arbitrarily chosen".

The best I can figure is that you have found, at considerable effort, another fractal (yes; randomly shaped antennas are fractals...) which has similar but not better performance FOM than the MI2 I have previously published.

This is most certainly NOT a general property of axis-symmetric, random fractal loops--which is what you assert. I proved that to myself, oh, 8 years ago.

The entire point of the FRACTAL ANTENNA CHALLENGE is to find a better performer. You tried, and failed, but you learned a lot about the benefits of fractal antennas and that is a very,very good thing.

I for one would like a copy of the EZNEC file, so I can give you my comments on it. Please send the file as an e-mail attachment, as per your public offer to provide same.

I alos want to know what you found for the gain and field strength of your 5 inch spiral, which you claim has a radiation resistance of 30 ohms--but is very,very electrically small.

I applaude your effort.

73
Chip N1IR

2857. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921140254.26918.00000098@ng-md1.aol.com>
Source record: 180049

>I don't care what other people think, my results speak for themselves

Then you will have no problem taking on a different challenge, where someone who has been in contests for 31 years, and knows how to beat you hands down with --what you consider--an incompetent antenna--asserts that you are not able to beat him.

You can't because you are an egotist and chicken:0(At least that's what your comments say...

CH1CKN!

73
Chip N1IR

2858. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <74sy5.577$6T.52149@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180050

"Richard Clark" <rwclark@seanet.com> wrote in message
news:39d631ec.142653755@news.seanet.com...
>
> Hi Steve,
>
> <snip>
>
> 73's
> Richard Clark, KB7QHC

Richard:

Thank you.

73
Steve

2859. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <M4sy5.578$6T.52794@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180051

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39CA494A.21EFB233@eznec.com...
>
> The key word here is the third from the end, "feedpoint". I'm pointing
> it out because it might have gotten a little lost in that lengthy but
> excellent presentation. When using the common equation Steve refers to,
> it's essential that both the radiation and loss resistances be referred
> to the same point. Failure to do this is the cause of mistaken claims
> about folded monopole efficiency and the efficiency of other antennas.
> Steve is, of course, doing it right, and in this case illustrating the
> calculation with both quantities referred to the feedpoint, a common
> procedure.
>
> Roy Lewallen, W7EL

Roy:

Thank you for the clarifications.

Steve, VE9SRB

2860. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921140538.26918.00000100@ng-md1.aol.com>
Source record: 180052

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000920050447.22365.00000113@ng-fc1.aol.com...
>>
>> Well Steve,
>>
>> You have me thoroughly confused.
>>
>> <snip>
>>
>> I would like to give you an opportunity to recant your statement that you
>have
>> an "arbitrarily chosen random design". This is surely wrong. This says
>that one
>> may choose any other random design and attain the same result.
>>
>> 73
>> Chip N1IR
>
>Chip:
>
>I ran the two antennas through EZNEC so that I could present gain numbers
>for you. Here's the comparison between the MI2 Fractal Loop and a random
>geometry. Both have same wire length and aperture size.
>
>
> MI2 Random
>
>Resonant Frequency: 15.15 MHz 14.83 MHz
>
>Resonant Resistance: 28 ohms 27 ohms
>
>Gain (Cu wire): 1.83 dBi 1.83 dBi
>
>
>Have a nice day.
>
>73,
>Steve VE9SRB
>

I'm having a SUPER day, thanks:-) In fact one of the best of my career:-)

But you didn't answer my question. Please do so.

73
Chip N1IR

2861. Help with random Wire with AH4

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: paulmac913@my-deja.com
Message-ID: <8qdjk1cci1@nnrp1.deja.com>
Source record: 180053

I just purchased an Icom 706MKIIG, and the AH-4 Automatic tuner.

I'm limited to attic space for my HF work. The attic is 50' by about 24' wide (on the floor). I'll be running 9913 about 25' from my shack up to the tuner. This is my 1st attempt at this, so please bear with my newbie questions...I'm attempting to get the best performance across as many bands as possible including 6m. 6m is important to me right now because I haven't earned my General privs yet...House is about 400' ASL.

1)Given my available attic space, what length wire should I use on each side of the tuner?

2)Should it be 2 25' wires on each side of the tuner, with the tuner mounted in the center of the attic? Maybe a loop?

3) I'm in a 2 story home, with the attic above. Does the ground side of the wire have to be physically grounded? If so, how?

Thanks in advance...
P

Sent via Deja.com http://www.deja.com/
Before you buy.

2862. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921141557.26578.00000517@ng-fi1.aol.com>
Source record: 180054

>> >>I can beat K3BU in a contest and have challenged him to do so. Why is he
>> >>SCARED
>> >>to compete?
>> >>
>> >>73
>> >>Chip N1IR
>> >>

Yuri may believe that he is God's gift. But I just got a call from one of his competitors who wants me to use his station in the 10M contest.

To beat Yuri on his own terms.

I turned him down, for the simple reason that I have responsibilities and don't expect to be on more than 20-24 of the 48 hours.(I can't go elsewhere to take care of them.)

But boy, he had some comments about Yuri!

Have you talked to your 'friends up in the lofty clouds' recently Yuri? You may get a very different picture if you asked them for some constructive criticism....

I look forward to competing with you.

73
Chip N1IR

2863. Re: Help with random Wire with AH4

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8qdklodpm1@nnrp1.deja.com>
Source record: 180055

Sounds like you have lots of room to put something up. I'm partial to homebrew wire dipoles myself. They're cheap, easy to install, and they work. The ARRL handbook has the formulas for dipole lengths in feet which is 234/frequency. So for 6M and a center frequency of 50.05Mhz, 234/50.05 = 4.675 feet on each leg of the dipole. Your attic size sounds ideal for a 20M dipole and even a 40M one if you bend it into a U shape. GL es 73

In article <8qdjk1cci1@nnrp1.deja.com>,
paulmac913@my-deja.com wrote:
> I just purchased an Icom 706MKIIG, and the AH-4 Automatic tuner.
>
> I'm limited to attic space for my HF work. The attic is 50' by about
24'
> wide (on the floor). I'll be running 9913 about 25' from my shack up
to
> the tuner. This is my 1st attempt at this, so please bear with my
> newbie questions...I'm attempting to get the best performance across
as
> many bands as possible including 6m. 6m is important to me right now
> because I haven't earned my General privs yet...House is about 400'
ASL.
>
> 1)Given my available attic space, what length wire should I use on
each
> side of the tuner?
>
> 2)Should it be 2 25' wires on each side of the tuner, with the tuner
> mounted in the center of the attic? Maybe a loop?
>
> 3) I'm in a 2 story home, with the attic above. Does the ground side
of
> the wire have to be physically grounded? If so, how?
>
> Thanks in advance...
> P
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

2864. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <lnsy5.590$6T.53896@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180056

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921140012.26918.00000097@ng-md1.aol.com...
>
> I, for one, want you to explain what you mean by "arbitrarily chosen".
>

I said to myself, what if I arrange the wires like this ....

> The best I can figure is that you have found, at considerable effort,

One piece of paper and one minute (maybe two) of drawing some straight lines
within a square box ....

>another
> fractal (yes; randomly shaped antennas are fractals...)

This would mean that all antennas are fractals, so why all the fuss?
Actually, randomly shaped antennas are not fractals.

>which has similar but
> not better performance FOM than the MI2 I have previously published.
>

I never said it had to be better. I simply claimed that a random geometry
would provide similar performance.

> This is most certainly NOT a general property of axis-symmetric, random
fractal
> loops--which is what you assert. I proved that to myself, oh, 8 years ago.
>

Then perhaps you should reevaluate your proof.

> The entire point of the FRACTAL ANTENNA CHALLENGE is to find a better
> performer. You tried, and failed, but you learned a lot about the benefits
of
> fractal antennas and that is a very,very good thing.
>

Actually, I think the Fractal Challenge is part of an ongoing effort of self
promotion (my personal opinion, no offence intended). I think you expected
no one to really come up with a design that was even close.

>
> I for one would like a copy of the EZNEC file, so I can give you my
comments on
> it. Please send the file as an e-mail attachment, as per your public
offer to

> provide same.
>

Like you freely provide information to people on this newsgroup? I could
not even get you to tell me what the radiation effiicnecy of the MI2 was.

> I alos want to know what you found for the gain and field strength of your
5
> inch spiral, which you claim has a radiation resistance of 30 ohms--but is
> very,very electrically small.
>

What 5 inch spiral? I never said I had a 5 inch spiral.

>
>
> I applaude your effort.
>
> 73
> Chip N1IR

Thank you.

73,
Steve VE9SRB

2865. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CA52A2.68B6@wt.net>
Source record: 180057

Roy Lewallen wrote:

>
> I feel that people espousing both definitions of dBd were very short on
> citations of its use, and made their points by being more loud than
> convincing. And I stand firm in my conviction that whenever it's used,
> there's a large amount of room for misinterpretation. The use of it you
> just proposed is different from Ed's and the ARRL's definition and use,
> which serves to illustrate the problem. There's no problem with using
> the term, however, provided that you carefully state just what it means
> each time you use it, as I suggested in my original posting.
>
> Roy Lewallen, W7EL

I've always felt dbd when used randomly should always be in free space. The use of dbd over earth is valid for sure, but confusing as heck to anyone unaware of this use that happens to want to compare a certain antenna to another one on paper. Myself, I only use dbd in free space when stating the gain of an antenna on say this NG."If not dbi". That way it can easily be compared to others in free space. If I stated the gain of say a low dipole at 7.5 dbd over real ground, it's fairly useless for anyone except me. Unless I tell them, they don't know how high, how good a ground quality, etc, etc. So unless they get real lucky, trying to compare that antenna to say a yagi, will likely have quite a bit of error. I think db over earth real handy for local site comparisons, but for describing the gain of antennas on a public forum, I'll always use dbd in free space, if not dbi. dbi being prefered. The real key to my preferring dbd/free space, is it's easily converted to dbi by subtracting 2.15. So to me they can be easily interchanged. IE: 0 dbi = -2.15 dbd. Very clear and easy to deal with. Throw in the ground effects, and it all goes out the window,unless like you say, I include all the other pertinant data. I try to use dbi whenever possible. MK
--
http://web.wt.net/~nm5k

2866. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Gosy5.592$6T.53902@bgtnsc05-news.ops.worldnet.att.net>
Source record: 180058

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921140538.26918.00000100@ng-md1.aol.com...
>
>
> I'm having a SUPER day, thanks:-) In fact one of the best of my career:-)
>

Good for you.

>
> But you didn't answer my question. Please do so.
>
> 73
> Chip N1IR

What question?

Steve

2867. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39CA5474.8CA71CD1@mwci.net>
Source record: 180059

Roy Lewallen wrote:

> At the risk of opening this whole topic again, let me clarify what I
> said.
>
> My statement was strictly in reference to the definition of the term
> "dBd", and has nothing to do with the legitimacy or usefulness of
> comparing antennas to dipoles. It is certainly legitimate and useful to
> compare the gain of a Yagi at 60 feet with a dipole at 60 feet. The
> danger is in simply referring to the Yagi's gain as "XX dBd", with "dBd"
> meaning this gain ratio. There are too many people, like Ed, the ARRL,
> and various other amateur publications that simply define dBd as being
> 2.15 dBi. The result would be misinterpretation, to the tune of 5 - 6
> dB, of what should be a valid comparison.
>
> It's also legitimate and useful to compare the free space gain of a Yagi
> to the free space gain of a dipole, since both have similar elevation
> patterns at low and moderate angles, and so will have similar relative
> gains when both are elevated to the same height. Here, there's no
> ambiguity.

I am and always have been very much aware of all of this. I and a lot of others know the drill. What I don't see is the need for the pejorative rhetoric. I am standing pat on that.

> I feel that people espousing both definitions of dBd were very short on
> citations of its use, and made their points by being more loud than
> convincing. And I stand firm in my conviction that whenever it's used,
> there's a large amount of room for misinterpretation. The use of it you
> just proposed is different from Ed's and the ARRL's definition and use,
> which serves to illustrate the problem. There's no problem with using
> the term, however, provided that you carefully state just what it means
> each time you use it, as I suggested in my original posting.

In the immortal words of John Gotti (behind bars) "It's all in the parameters. You got no parameters, you got nothin".

> Roy Lewallen, W7EL
>
> "William E. Sabin" wrote:
> >
> > Roy Lewallen wrote:
> >
> > > A number of people have
> > > argued long and loud on this newsgroup that dBd means "dB relative to a
> > > dipole at some height over ground" rather than relative to a dipole in

> > > free space. ARRL publications are among the very few which give an
> > > explicit definition.
> >
> > The term dBd does have legitimate uses, if the scenario is defined, for example
> > comparing a dipole at 60 feet with a 3 el Yagi at the same height and same
> > location. Those who *suggest* this are not *proclaiming long and loud*. This kind
> > of ridicule is not needed or deserved.
> >
> > Bill W0IYH

Bill W0IYH

2868. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39CA55BD.7D3D02D9@uci.edu>
Source record: 180060

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000921140538.26918.00000100@ng-md1.aol.com...
> >
> >
> > I'm having a SUPER day, thanks:-) In fact one of the best of my career:-)
> >
>
> Good for you.
>
> >
> > But you didn't answer my question. Please do so.
> >
> > 73
> > Chip N1IR
>
> What question?
>
> Steve

He probably doesn't have time to ask it.

2869. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Walter Maxwell <w2du@journey.com>
Message-ID: <qkqy5.917$mC.46810@monger.newsread.com>
Source record: 180061

Hi Bob, thanks for the interest in Reflections 2. The entire manuscript has been proofed and is now being put in page format at the publisher, which is Worldradio Books. It should be released for printing soon, but I have no specific date as yet.

It contains a lot of new information that I believe will interest the ham community, including one chapter that analyzes the operation of RF power amplifiers.

I'll keep the NG posted when release is imminent.

Walt, W2DU

2870. Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921144908.22888.00000089@ng-fq1.aol.com>
Source record: 180062

Notes From An Inexperienced Chili ConTaster Named CHIRP (famous East Coast contester, DXer and best antenna designer ever lived), who was visiting Texas from the East Coast:

"Recently I was honored to be selected as an outstanding Famous Fractal celebrity in Texas, to be a judge at a chili cook-off, because no one else wanted to do it. Also the original person called in sick at the last moment, and I happened to be standing there at the judge's table asking directions to the beer wagon when the call came. I was assured by the other two judges (Native Texans) that the chili wouldn't be all that spicy, and besides they told me I could have free beer during the tasting, so I accepted."

Here are the scorecards from the event:

Chili # 1: Mike's Maniac Mobster Monster Chili

JUDGE ONE: A little too heavy on tomato. Amusing kick.
JUDGE TWO: Nice, smooth tomato flavor. Very mild.
CHIRP: Holy shit, what the hell is this stuff? You could remove dried paint from your driveway with it. Took me two beers to put the flames out. Hope that's the worst one. These Texans are crazy.

Chili # 2: Arthur's Afterburner Chili

JUDGE ONE: Smoky, with a hint of pork. Slight Jalapeno tang.
JUDGE TWO: Exciting BBQ flavor, needs more peppers to be taken seriously.
CHIRP: Keep this out of reach of children! I'm not sure what I am supposed to taste besides pain. I had to wave off two people who wanted to give me the Heimlich maneuver. They had to walkie-talkie in 3 xtra beers when they saw the look on my face.

Chili # 3: Fred's Famous Burn Down the Barn Chili

JUDGE ONE: Excellent firehouse chili! Great kick. Needs more beans.
JUDGE TWO: A beanless chili, a bit salty, good use of red peppers.
CHIRP: Call the EPA, FCC, I've located a RF or uranium spill. My nose feels like I have been snorting Drano. Everyone knows the routine by now. Barmaid pounded me on the back; now my backbone is in the front part of my chest. I'm getting shit-faced.

Chili # 4: Bubba's Black Magic

JUDGE ONE: Black bean chili with almost no spice. Disappointing.
JUDGE TWO: Hint of lime in the black beans. Good side dish for fish or other mild foods, not much of a chili.
CHIRP: I felt something scraping across my tongue, but was unable to taste it. Sally, the bar maid, was standing behind me with fresh refills; that 300lb.

bitch is starting to look HOT, just like this RF nuclear-waste I'm eating.

Chili # 5: Linda's Legal Lip Remover

JUDGE ONE: Meaty, strong chili. Cayenne peppers freshly ground, adding considerable kick. Very impressive.
JUDGE TWO: Chili using shredded beef; could use more tomato. Must admit the cayenne peppers make a strong statement.
CHIRP: My ears are ringing, and I can no longer focus my eyes. I farted and four people behind me needed paramedics. The contestant seemed offended when I told her that her chili had given me brain damage. Sally saved my tongue from bleeding by pouring beer directly on it from a pitcher. It really pisses me off that the other judges asked me to stop screaming.

Chili # 6: Vera's Very Vegetarian Variety

JUDGE ONE: Thin yet bold vegetarian variety chili. Good balance of spice and peppers.
JUDGE TWO: The best yet. Aggressive use of peppers, onions, and garlic. Superb.
CHIRP: My intestines are now a straight pipe filled with gaseous, sulfuric flames. No one seems inclined to stand behind me except that slut Sally. I need to wipe my ass with a snow cone!

Chili # 7: Susan's Screaming Sensation Chili

JUDGE ONE: A mediocre chili with too much reliance on canned peppers.
JUDGE TWO: Ho Hum, tastes as if the chef literally threw in a can of chili peppers at the last moment. I should note that I am worried about Judge Number 3. He appears to be in a bit of distress as he is cursing uncontrollably.
CHIRP: You could put a grenade in my mouth, pull the pin, and I wouldn't feel a damn thing. I've lost the sight in one eye, and the world sounds like it is made of rushing water. My shirt is covered with chili hich slid unnoticed out of my mouth. My pants are full of lava-like shit to match my damn shirt. At least during the autopsy they'll know what killed me. I've decided to stop breathing, it's too painful. I'm not getting any oxygen anyway. If I need air, I'll just suck it in through the 4-inch hole in my stomach.

Chili # 8: Helen's Mount Saint Chili

JUDGE ONE: A perfect ending, this is a nice blend chili, safe for all, not too bold but spicy enough to declare its existence.
JUDGE TWO: This final entry is a good, balanced chili, neither mild nor hot. Sorry to see that most of it was lost when Judge Number 3 passed out, fell and pulled the chili pot on top of himself. Not sure if he's going to make. Poor Yank.
CHIRP: --------------(editor's note: Judge #3 was unable to report)"

And he has the guts to challenge people to contests?
I hope this helps to put CHIRP in proper light.
(With apology to original writer.)

bada BUm

2871. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000921145227.12224.00000055@ng-ci1.aol.com>
Source record: 180063

>>The question is, if you fail to consider the application, or even fail to consider the antenna's weight at all, have you really completed your design?<<

>Certainly plastic dowels Rick; I chose to use PVS because that's what people >like to use.

My observation was directed more toward Ed and other NG readers as a general comment about compact roof-mounted designs vs. hunky tower-mount antennas. It really wasn't aimed "at" the FQY. I'm sure everyone is aware the FQY is an experiemental design.

As a practical matter, I couldn't use a PVC version of the FQY here because it would almost certainly bring down my skinny 40 foot mast in the first frontal passage to come across the lake (like the one occurring right now with gusts to 45 MPH). Consequently, I use a 3-pound 3-element short-boom yagi that delivers 5-6 dBd gain at a weight my mast can handle safely. I realize a production-engineered FQY would probably weigh far less than 9 pounds, and a production-engineered version of my 3-pound beam might weigh somewhat more.

>P.S> The hexbeam is 4 times the area...too big a turning radius. WOuldn't want to upset my good neighbors with an OBVIOUS antenna!<

I can't agree that's a fair criticism of Mike's antenna. The Hex is flatter in profile, and the one I built with wooden spreaders was virtually invisible against the trees (far less obvious than the Moxon). If the Hex has faults, being overly conspicuous sure isn't one of them.

>P.P.S. How's that EIRP calculation goin'?

Hadn't given it another thought. Did measure true PEP output and line loss, though, so I know with certainty how much power is reaching my antenna terminals.

Rick K1BQT

PS: Ever notice how much smaller ALL antennas look when you double the mounting height?

2872. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921150529.26895.00000143@ng-md1.aol.com>
Source record: 180064

>ws.ops.worldnet.att.net>
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921140012.26918.00000097@ng-md1.aol.com...
>>
>> I, for one, want you to explain what you mean by "arbitrarily chosen".
>>
>
>I said to myself, what if I arrange the wires like this ....
>
>> The best I can figure is that you have found, at considerable effort,
>
>One piece of paper and one minute (maybe two) of drawing some straight lines
>within a square box ....
>

>>another
>> fractal (yes; randomly shaped antennas are fractals...)
>
>This would mean that all antennas are fractals, so why all the fuss?

All random shaped ones are.

>Actually, randomly shaped antennas are not fractals.
>

Yes they are. You do not understand fractals if you say this.

>>which has similar but
>> not better performance FOM than the MI2 I have previously published.
>>
>
>I never said it had to be better. I simply claimed that a random geometry
>would provide similar performance.
>

Well, show me. Provide the file you publicly offered to provide.

>> This is most certainly NOT a general property of axis-symmetric, random
>fractal
>> loops--which is what you assert. I proved that to myself, oh, 8 years ago.
>>
>
>Then perhaps you should reevaluate your proof.
>

Don't have to. However, if you are of the opinion that all loops of a given length of wire can produce oodles and oodles of antennas with the same resonance and efficiency and gain and directivity, then you are wrong. It would make an interesting paper though. Why don't you publish it and then others can publish papers showing your errors.

Last year there was a paper on meander loading which made outrageous claims on efficiency (in Transactions) that even we on this NG showed to be wrong. So I guess there is room for false assertions.

>> The entire point of the FRACTAL ANTENNA CHALLENGE is to find a better
>> performer. You tried, and failed, but you learned a lot about the benefits
>of
>> fractal antennas and that is a very,very good thing.
>>
>
>Actually, I think the Fractal Challenge is part of an ongoing effort of self
>promotion (my personal opinion, no offence intended).

I do take offense. If this is the case, then to what end is such self-promotion done?
So that I can have W8JI threaten to kill me?

I think you expected
>no one to really come up with a design that was even close.
>

Steve, I founded fractal element design 12 years ago. I've seen it all. It may be new to you, but I've been around the corner a few times.

Close isn't better, is it?

>>
>> I for one would like a copy of the EZNEC file, so I can give you my
>comments on
>> it. Please send the file as an e-mail attachment, as per your public
>offer to
>> provide same.
>>
>
>Like you freely provide information to people on this newsgroup? I could
>not even get you to tell me what the radiation effiicnecy of the MI2 was.
>

I've said it many times. As recently as two weeks ago on this NG.

>> I alos want to know what you found for the gain and field strength of your
>5
>> inch spiral, which you claim has a radiation resistance of 30 ohms--but is
>> very,very electrically small.
>>
>
>What 5 inch spiral? I never said I had a 5 inch spiral.

You said you had a spiral for 14 Megs that was 5 inches in size. Tell us about it.

>>
>>
>> I applaude your effort.
>>
>> 73
>> Chip N1IR
>
>Thank you.
>
>73,
>Steve VE9SRB
>

So where is the file you offered?

73,
Chip N1IR

2873. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921150738.26895.00000146@ng-md1.aol.com>
Source record: 180065

>It
>really wasn't aimed "at" the FQY. I'm sure everyone is aware the FQY is an
>experiemental design.

Yes, of superior performance and reliability and ease of construction for its
form factor.

73
Chip N1IR

2874. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ca5f9c.31325691@news.akorn.net>
Source record: 180066

On 21 Sep 2000 16:35:36 GMT, fractenna@aol.com (Fractenna) wrote:

>The antenna 's weight is in PVC. If , say (in this case) 8-9 lbs is too much
>for an antenna that WITHSTOOD A TORNADO, then you provide a better one:-)
>
>In that form factor too!
>
>P.S> The hexbeam is 4 times the area...too big a turning radius. WOuldn't want
>to upset my good neighbors with an OBVIOUS antenna!
>
>73
>Chip N1IR

I'm a little puzzled by the "withstood a tornado" claim. Was this a
"real" tornado that actually crossed over Chip's QTH, or just hot
air?

2875. channel#2 tv antenna,??to build?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <i8ckssos5m1vtkfs2h4mqh1gn07qa74u0j@4ax.com>
Source record: 180067

I as "just considering" building a antenna for channel 2, out in my area they have a new transmitter for channel, but I am right on the ''fringe'', anyone out there made anything close to this.?? Would appreciate your input. I know I can go ''someplace'' and buy one, but would like to try my hand and see what I come up with... Got the idea because I took down some old tv antennas of my brother,(sold their home,getting cable)and the fact that a new station moved into the area. Well almost in my area, it is about 50 miles away. Hope you can help. Callie Lorentson

2876. Alpha Delta Antennas COMMENTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Joe & Bonita Sanada <bsanada01@snet.net>
Message-ID: <39CA65E5.3CFA81EB@snet.net>
Source record: 180068

Hi I am looking to purchase an Alpha Delta DX-LB 160-10 meter Antenna

anyone have any comments on ANY of the Alpha Antenna products I

appreciate it thanks 73 Joe. W1JAS Terryville, Connecticut....

2877. Re: Straight Beverage versus bent Fractals Bozzo bin trigger-killfile

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920214935.18580.00000116@ng-cu1.aol.com>
Source record: 180069

>From: "George, W5YR" w5yr@att.net

>Some people just have trouble dealing with *real* authority figures who
>have a demonstrated track record for technical and professional
>integrity.

Well, I would like to agree about the integrity, but I do not consider myself
an authority on antennas. I am here to learn, just like most everybody else.

73,
Ed Hare, W1RFI

2878. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000920220119.18580.00000120@ng-cu1.aol.com>
Source record: 180070

>From: klocko@toad.net

>Actually, then you will actually have a gain.

Not necessarily. If one has gain, one must have directivity, but it is entirely possible to have directivity but no gain. Most beverages and loopstick antennas are two examples.

"Gain" is probably by far the more useful of the two terms in most antenna-related contexts.

73,
Ed Hare, W1RFI

2879. Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: jason_hsu@my-deja.com
Message-ID: <8qbsptbvk1@nnrp1.deja.com>
Source record: 180071

The first 6 questions in this section of the question pool ask for antenna radiation patterns for two-1/4 wavelength vertical antennas at different distances and fed at different phases. Does anyone have the formula? I can see what the answers are, but I want to know how I can derive them.

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com http://www.deja.com/
Before you buy.

2880. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8qbueldlc1@nnrp1.deja.com>
Source record: 180072

In article <20000920220119.18580.00000120@ng-cu1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >From: klocko@toad.net
>
> >Actually, then you will actually have a gain.
>
> Not necessarily. If one has gain, one must have directivity, but it
is
> entirely possible to have directivity but no gain. Most beverages and
> loopstick antennas are two examples.
>
> "Gain" is probably by far the more useful of the two terms in most
> antenna-related contexts.

Hi Ed,
This is really a question of definition. In the previous post, gain was defined as the directivity times the efficiency. The gain, whatever it is, is always less than the directivity. It may not be correct to say that an antenna with a "gain" of -23 dBi actually has gain, but that's what it's called. (Can you imagine the confusion in saying the antenna has a loss value of 23 dBi?). My quibble was with the statement that including ohmic loss results in a directivity. It results in a gain. There also may be other losses, such as ground losses, etc. that further reduce the gain. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

2881. Re: G5RV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <w8fy5.202270$c5.4384495@news2.rdc1.on.home.com>
Source record: 180073

> Both legs of the flat-top on the G5RV are the same length, so it won't
matter
> at all which leg goes to which output connector on the balun. The balun
SHOULD
> be a 1:1, if I remember the G5RV design correctly. The balun is generally
used
> where the coax joins the open-wire line section. A choke balun (current
balun)
> would be the best choice.
>
> 73,
> Ed Hare, W1RFI

Thanks Ed.

Barry

2882. Re: Loaded dipoles on 80m

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39C99984.B2C07F72@dvol.com>
Source record: 180074

Reg Edwards wrote:

> Brian, welcome aboard. You arrived in good time. We've
> just spliced the mainbrace. Get this mug of untaxed rum
> down your inside. Hic !

>
You blokes never did have a spot of class never mind your fixation on
silly little millimeters. Which is FrogCrap anyway. Napoleon actually
won even ya did slowly cyanide him to death. And sit on yer rum Reg,
maybe it'll hatch into something useful if you sit on it long enough. We
do Kentucky and Tennessee corn. hic. hic^2.
>
And watch for what crawls over yer gunwhales 'ole bean, we paddle *very*
quietly and we're everywhere in the gloom looking for heads to eat.
>
G'nite mate. Ooops: Damn. Wrong island. Apologies.

>
> ---
> Reg
> ============================
>
> Brian sez -
> > . . . thus the window opens on the Second Boston Tea Party
> . .

Whiskey Three Red Velvet

2883. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39C9999D.2BA1@wt.net>
Source record: 180075

Yuri Blanarovich wrote:
>
> I wonder if there are any practical experiences pointing to the best ground for
> HF for use with vertically polarized arrays.
> The question is what is better, situating the antennas on the beach next to the
> ocean, or is the salt marsh better. Would waves have negative impact on the
> reflective properties of the salt water? Would salt marsh have perhaps more
> salt concentration and be better? Any BC experiences or studies?
> This thread is open :-)
>
> Yuri, K3BU

I notice reading in one of Bill Orrs antenna books he mentioned that
Bell labs ran a study in 1932 to find the best ship to shore radio
setups. According to their tests, for over water use, the closer the
shore station to the water the better. They tested using 66 and 33
meters, along with a few other freq's between 40 and 20 meters in the
day. They had ships at sea out to 2500 miles, and many distances in
between. The 66 and 33 m tests showed an 8-12 db attenuation at a
distance of one mile inland compared to a station on the beach/water.
Now, how the shore station would compare to the inland station when
working another farther inland station I don't know. But I think I'd put
my money on the one over or closest to the water. I think anything close
to the ocean or to salt march etc, would be very good. I've been down to
the beach quite a few times when running mobile. I know my car always
does extra well when I'm parked next to the water on the beach. I
remember one time I even threw a ground wire from my car into the water
to see if it made any difference. Didn't seem to hurt things, but wasn't
drastic. Seems I was already doing ok, just being over that good ground
area. MK
--
http://web.wt.net/~nm5k

2884. Re: Help to build a dish of 4M

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ar9jss82tj58v46kci99p0slitp1kqltal@4ax.com>
Source record: 180076
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Wed, 20 Sep 2000 17:28:16 -0500, "KentWI" <kentwi@ameritech.net>
wrote:

>The gain of a 4 meter dish is 10dB???

The physical are of a 4 m dish is 12 mï¿½ and the effective capture are
for is about 5 .. 8 mï¿½ depending illumination and other factors.

The capture area for a simple free standing dipole is about 0.13
square wavelengths.

On 2 m wavelength the capture area of the free standing dipole is
about 0.5 mï¿½, on 70 cm about 0.06 mï¿½.

The dish gain on 2 m would thus be 5 mï¿½/0.5 mï¿½ = 10 or 10 dBd,
on 70 cm 5 mï¿½/0.06 mï¿½ = 78 or 19 dBd.

Paul OH3LWR

2885. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C9B35C.665764D5@eznec.com>
Source record: 180077

The ground quality is much more important for vertical antennas than horizontal ones, so it would be misleading to make a blanket statement covering both. In the case of most horizontal antennas, there's no ground connection, so no current returns through the Earth, and the ground conductivity doesn't impact efficiency. For ground-mounted verticals, especially ones much less than a half wavelength high, the ground conductivity directly affects efficiency, and a radial system is generally used to increase the effective conductivity. Ground also has another, quite distinct, effect on both horizontal and vertical antenna patterns -- but it's different for each. An antenna's elevation pattern is formed by interference between the signal radiating directly from the antenna and one reflected off the ground. This reflection (which is actually more complex than a simple reflection) takes place within a few wavelengths of the antenna, or closer, depending on the antenna height and elevation angle being considered. Horizontally polarized waves are relatively insensitive to ground conductivity as far as reflection is concerned, except at very high angles. So ground conductivity can be important when designing an NVIS system with a horizontal radiator, but not for long-haul communications. Vertically polarized waves are another story. For these, typical ground conductivity leads to a severe attenuation of low angle signals due to the nature of the ground reflection. Only with very high conductivity ground, like salt water, will the elevation pattern approach the idealized perfect-ground pattern so often seen in books. Over most typical grounds, low angle radiation will be much poorer. These effects can easily be seen with any of the available modeling programs.

The bottom line is that a horizontal antenna won't benefit much by being close to salt water (unless very high angle radiation is the goal). Vertical antennas will benefit a great deal. I can easily believe the figures Mark quotes, provided that they're for a vertical antenna. I believe that anyone fortunate enough to have salt water, either ocean or marsh, within a few wavelengths of his antenna should take advantage of its high conductivity by using a vertically polarized antenna.

Roy Lewallen, W7EL

Mark Keith wrote:
>
> I notice reading in one of Bill Orrs antenna books he mentioned that
> Bell labs ran a study in 1932 to find the best ship to shore radio
> setups. According to their tests, for over water use, the closer the
> shore station to the water the better. They tested using 66 and 33
> meters, along with a few other freq's between 40 and 20 meters in the
> day. They had ships at sea out to 2500 miles, and many distances in

> between. The 66 and 33 m tests showed an 8-12 db attenuation at a
> distance of one mile inland compared to a station on the beach/water.
> Now, how the shore station would compare to the inland station when
> working another farther inland station I don't know. But I think I'd put
> my money on the one over or closest to the water. I think anything close
> to the ocean or to salt march etc, would be very good. I've been down to
> the beach quite a few times when running mobile. I know my car always
> does extra well when I'm parked next to the water on the beach. I
> remember one time I even threw a ground wire from my car into the water
> to see if it made any difference. Didn't seem to hurt things, but wasn't
> drastic. Seems I was already doing ok, just being over that good ground
> area. MK
> --
> http://web.wt.net/~nm5k

2886. Re: Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39C9B872.E8483F35@eznec.com>
Source record: 180078

For two identical vertical elements with equal magnitude currents and
identical current distribution over perfect ground, the field strength
at the horizon will be

2*E1*cos((s/2)*cos(phi)+A2/2) where

E1 is the field strength from a single element (*)
s is the element spacing
A2 is the phase angle of current in element 2 relative to element 1
phi is the azimuth angle

Notice all the qualifications. Relieving any of them will complicate the
formula. A good reference is the "Medium-Frequency Broadcast Antennas"
chapter of Johnson, _Antenna Engineering Handbook_, or earlier editions
edited by Jasik.

Roy Lewallen, W7EL

(*) This isn't necessarily the field strength from a single isolated
element with half the input power. Mutual coupling will generally modify
the field strengths from the elements, resulting in a different value
from each when in the array than when isolated.

jason_hsu@my-deja.com wrote:
>
> The first 6 questions in this section of the question pool ask for
> antenna radiation patterns for two-1/4 wavelength vertical antennas at
> different distances and fed at different phases. Does anyone have the
> formula? I can see what the answers are, but I want to know how I can
> derive them.
>
> --
> Jason Hsu, KB9PNZ
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

2887. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <02djsscqau85i5cvh75fcosttscn2euej7@4ax.com>
Source record: 180079

Ed:

Believe it or not, I agree with your entire post.

The point is that the data that has been presented by NC/Chip/Phil/Dr Nathan Cohen PhD/et al is only, to use your words, a first approximation. There is alot more data that could be presented that would give us a better idea of the antenna's performance than the little bit that has been allowed out.

I've been asking for more, and better data, and the Fractenna's have not been forthcoming with that data. Yes. there is one comparison between the FQY and a dipole.

I also agree that 3 dBd is an improvement over a dipole, and the F/B has merit as well. The problem, and the reason I've asked for a comparison between the FQY and any other Yagi, is that the F/B data, and the side and rear rejection data is not apparent. There is no way for us to extrapolate that data from a dipole:FQY comparison. Therefore, there is no way to compare the merits/caveats, other than the forward gain and the reduced form factor, of using the FQY over a full sized Yagi tuned for the same frequencies.

I thought I had made my intent in this clear, but reading back, I see I did not. My mistake, there.

-SSB

On or about Wed, 20 Sep 2000 17:47:29 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>, using the forum rec.radio.amateur.antenna did say:

:sideband <sideband@cac.net> wrote:
:
:> Dipoles vary, as do all antennas. A dipole tested at one site will
:> perform slightly differently at another. Two different dipoles at the
:> same site will perform slightly differently than each other.
:
:Yes, to a relatively minor degree, but yes. This is why the term dBd has a
:half-wave dipole in free space as the reference antenna. If a dipole tested
:at one site will perform slightly differently than another, then the same
:thing could be said for the Yago or other reference antenna you are asking
:him to compare his antenna to. If the testing really were done on a
:calibrated antenna range, most of those site differences would be calibrated
:out. On a calibrated range, one can either apply power to an antenna,
:measure the field or power density at a particular point, and calculate the
:gain from that measurement (in that azimuth/elevation direction) or can A/B
:compare the measured power density against a reference antenna on the site

:(that presumably has very well documented performance). That is my general
:understanding of the subject; I am sure there are some on this NG who can
:add a lot to that generalization.
:
:> It is the convention, yes, and it gives a certain set of data, yes.
:> And that data is used to compare antennas, yes. But, as stated before,
:> dipoles vary. Conditions at testing locations vary. Ground varies.
:
:Which is why ONLY testing done at a calibrated antenna range can be seen as
:reasonably accurate. Modeling can be reasonably accurate too, to the extent
:that the model matches the conditions under which the antenna will be
:installed, or at least matches some reasonably agreed upon standard set of
:conditions. For the basis of comparing antennas, average ground conditions
:are usually acceptable as a reasonable basis for the model. The patterns
:that Chip has posted appear to have been modeled under those conditions, so
:I accept the results as a good first approximation of the performance of his
:antennas.
:
:> So what exactly are you afraid of? This comparison between your Yagi,
:> and any other Yagi of the same frequency range will only serve to show
:> the merits of your rediced form factor design. I don't see what the
:> big deal is here.
:
:Then make the comparison; take the modeled gain figures of any Yagi, convert
:them to dBd and do the subtraction.
:
:> Or is it that you don't want the world to know that in your FQY all
:> they're getting is something that's only slightly better than a
:> dipole, and directional?
:
:If 3 dBd is "slightly better" than a dipole to you, then that is what you
:can infer from the data published on his page. But don't discount the value
:of "directional." Although that 3 dB won't make much difference on transmit
:with strong signals, that F/B can make quite a difference on receive (I
:would be curious to know how much that F/B varies across the 10 M band,
:though -- at least across the CW/digital/voice/FAX portion of the band; that
:is why I was hoping to get a NEC model. If any of you have typed it in from
:the dimensional data on the page, please email it to me; I just don't have
:time to input the data.) Not only will you not hear the signals off the
:sides and back, more important, you won't hear noise (local or atmospheric)
:off the sides and back, giving an improvement on receive > 3 dB in the
:resultant S/N. On receive, I would take 0 dBd gain and 25 dB F/B over a
:dipole any day.
:
:And, in reality, the gain of 3 dBd for that 10M quad looks to be reasonable,
:and it is presented in a way that is relatively straigthforward.
:
:I really don't see what the beef is wrt the antenna's performance claims.
:
:73,

:Ed Hare, W1RFI
:

2888. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qclm6kum1@plutonium.btinternet.com>
Source record: 180080

A wire to the sea from a car parked on the beach will not
have much effect. The very low resistance contact with the
sea will be nullified by the high wire reactance. Very
little current will flow along it.

Only by parking in the sea will you obtain any benefit.

Reg.

2889. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39C9E144.50FB9313@mwci.net>
Source record: 180081

Roy Lewallen wrote:

> A number of people have
> argued long and loud on this newsgroup that dBd means "dB relative to a
> dipole at some height over ground" rather than relative to a dipole in
> free space. ARRL publications are among the very few which give an
> explicit definition.

The term dBd does have legitimate uses, if the scenario is defined, for example comparing a dipole at 60 feet with a 3 el Yagi at the same height and same location. Those who *suggest* this are not *proclaiming long and loud*. This kind of ridicule is not needed or deserved.

Bill W0IYH

2890. Re: Mobile use of AT50 w/TS50

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Dennis <wa8shc@stratos.net>
Message-ID: <969535547.586829@newscache.cleveland.core.com>
Source record: 180082

Could not find the mods on QRZ.com, but did find them on
www.mods.dk

--
Dennis wa8shc

RadioFreq0 <radiofreq0@aol.com> wrote in message
news:20000920070248.12529.00000001@ng-md1.aol.com...
> Any of you using an AT50 with a TS50 in a mobile setup? How are you
configuring
> it and with what type antenna?
> Can I put my AT50 in the trunk? Is it a waist to use a 20 mtr hamstick for
> multiband ops?
> Aside from using a screwdriver, what can I do with the AT50 in my mobile?
Or is
> it really for base/portable ops?
> tnx,
> Jeff

2891. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921080011.07865.00000144@ng-da1.aol.com>
Source record: 180083

>In article <0YSx5.705$u95.2248226@news.ntplx.net>,
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>>
>> Also, that dBi reference is for the gain of the antenna in situ; ie,
>over
>> ground, with any other attenuations factored (loss through buildings,
>etc.)
>
>Hi Ed,
>Did you lose me in the noise? I'd like to keep the discussion going -
>it's getting pretty interesting. See my reply to your post last night.
>vy 73,
>Bill N3WK
>
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>
>
>
>
>
>

This thread is closed.

NC

2892. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c9f79f.4699976@news.akorn.net>
Source record: 180084

On Wed, 20 Sep 2000 21:57:17 -0400, "Prof. Curt M. Breneman"
<brenec@rpi.edu> wrote:

>
>Isn't the point of a Beverage antenna to produce a low-noise (high S/N
>ratio) signal of around 10 db or less actual amplitude than a comparable
>longwire antenna?

Yes, the Beverage improves S/N ratio on receiving because it is
directive, but it does so at the expense of overall signal level. It
is a negative gain antenna, but with fair directivity.

73 Tom

2893. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921080037.07865.00000145@ng-da1.aol.com>
Source record: 180085

>>From: sideband@mindspring.com
>
>>> This thread is closed.
>
>>I re-open it. This thread is once again open for business.
>
>Whew, and there for a minute, I thought I couldn't post to it any more. :-)
>
>73,
>Ed Hare, W1RFI
>
>
>
>
>
>
>

This thread is closed.

NC

2894. Re: Help to beginner! How to build a uhf-vhf antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <aOmy5.202545$c5.4387629@news2.rdc1.on.home.com>
Source record: 180086

>
> > Hi, All!!!
> > I've readed alot from these postings, but i can't find the answer to my
> > question. How to build a UHF-VHF antenna, maybe you know a web-site with
all
> > the sizes and parameters of antennas, or maybe you can explain it here?
> >
> > If it's important, I live in Canada, Quebec, Montreal.
> >
> > Waiting for reply!!!
>

Alex I tryed to e-mail you twice with the plans to Arrow's J-Pole twice the addresses were wrong. Hard to help someone when they will not tell you were they are.

Barry D.

2895. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921080244.07865.00000146@ng-da1.aol.com>
Source record: 180087

>Isn't the point of a Beverage antenna to produce a low-noise (high S/N
>ratio) signal of around 10 db or less actual amplitude than a comparable
>longwire antenna?
>
>Curt Breneman
>RPI Chemistry
>KC2EBP
>

Yes. Now we can get back to my comments where this was discussed..

73
Chip N1IR

2896. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39c9f833.4848466@news.akorn.net>
Source record: 180088

On 21 Sep 2000 01:14:47 GMT, w1rfi@aol.com (W1RFI) wrote:

>Had I done the testing at that location and the results agreed pretty well with
>the modeling, I would feel comfortable with the result of 3 dBd.

I think 3dBd is probably a reasonable gain for any half-size antenna
loaded with a reasonable form of loading.

I guess there is so much noise accompanying the good data that it gets
lost in the background. Thank's for reminding us Ed.

73 Tom

2897. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qcvq9rej1@iac5.navix.net>
Source record: 180089

Nuff said! Even fracky dos not have a fractal antenna...

"Fractenna" <fractenna@aol.com> wrote in message
news:20000920194528.18611.00000098@ng-cu1.aol.com...
> I know no one who has a fractal antenna who will now come on this NG.

2898. Re: NEC4 Model of Helically Wound Loop Re: MI2 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Kpny5.736$tl2.74242@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180090

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39c806c8.59205771@news.akorn.net...
> On Tue, 19 Sep 2000 12:45:04 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> Let me ask a question.
>
> When you calculated efficiency, did you plug a conductor resistance
> into NEC and let it normalize the loss resistance to the feedpoint?
>
> What I'm trying to ask is how you determined the amount of feedpoint
> impedance due to radiation resistance and the amount due to loss.
>
> 73 Tom

Hi Tom:

You're one step ahead of me. I did not yet calculate efficiency for a given practical conductor size. I will and when I do, I will post the results.

73, Steve

2899. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <quny5.740$tl2.76776@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180091

"W1RFI" <w1rfi@aol.com> wrote in message
news:20000920055826.24702.00000614@ng-cf1.aol.com...
> >From: fractenna@aol.com (Fractenna)
>
> Steve, this could certainly answer the questions about the last tenth of a
dB
> or so. Do you have EZNEC? If not, send the model to w1rfi@arrl.org and I
will
> run it on EZNEC to answer the question Chip is raising.
>

Hi Ed:

Thanks for the offer. I am arranging to get a copy of EZNEC from Roy. When
I do I will run the antennas and compare performance with a reasonable wire
size/loss. I will post results and provide files to anyone interested.
.
>
> I think I can see the confusion; a truly "random" design could be resonant
at
> any random frequency or frequencies, complicating this discussion
immensely.
> Perhaps it could be more accurate to describe his antenna simply as a
random
> design that meets the resonance criteria; certainly there are a lot of
easily
> discovered possible designs that are sufficiently random.
>
> 73,
> Ed Hare, W1RFI
>

The randomness of which I speak is in regards to the shape of the antenna.
I modeled the performance of the MI2 Fractal Loop as a baseline. Then,
using the same
total wire length as in the MI2 I created a random shape within the same
physical aperture as the MI2. The performance characteristics of both
antennas are
essentially the same.

73,
Steve, VE9SRB

2900. Re: Comments: Double Bazooka Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qd2q2$sn3$1@iac5.navix.net>
Source record: 180092

I had arrived at the same conclusions experimentally. Through the years I have tried about everything looking for bandwidth on 75/80 meters. I finally settled on a 12 inch diameter cage as a reasonable compromise between bandwidth and ease of installation.

"Walter Maxwell" <w2du@journey.com> wrote in message news:p8cy5.819$mC.37499@monger.newsread.com...
> My analysis of the double bazooka antenna appears in Chapter 18 of
> Reflections, which shows mathematically that the stubs contribute zilch to
> the bandwidth with respect to reducing the off-resonance reactance, but
> instead the bandwidth reduction is due entirely to the resistive losses in
> the coax. Its performance is similar to that of placing a dummy load in
> shunt with the terminals, or similar to the TF2D (or is it T2FD?), the wide
> band folded dipole with a 600-ohm resistor in the side opposite the feed
> terminals.
>
> Those who believe the bandwidth improvement is great are apparently unaware
> that the bandwidth improvement result only from power loss due to loss in
> resistance. The results are truly disappointing.
>
> Walt Maxwell, W2DU
>
>
>
>
>

2901. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <in3kss4e7htqmo6ue98kf8a9tp45htrant@4ax.com>
Source record: 180093

```
On or about 21 Sep 2000 12:00:11 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:This thread is closed.
:
:NC

Or so you thought.

-SSB
```

2902. FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921094601.07865.00000154@ng-da1.aol.com>
Source record: 180094

Congrats to Sarah for placing second in the CS Science fair (silver medal in Electronics category)! Sara did a study on improving performance on a 'quadgi' by using fractal elements.

I corresponded with her dad in the Spring. She's worked very hard and done a great job!

Sara got some folks at TRW to volunteer some chamber time to corroborate her range measurements.

As a professor, I am very gratified that young people have seen how useful, accessible, and rewarding it is to explore fractal antenna technology. As with Sara, I encourage all hams to experiment with this exciting new technology!

As for QST, which put Sara's pix in the UP FRONT section of the October issue, it sure is surprising ! The last they dealt with fractal antennas--I submitted a manuscript to Technical Correspondence in Feb 1994-- I had Marc Wilson (K1RO) and Paul Pagel (N1FB) denigrate me for submitting an April Fool's article!

Some April Fool's article! QST missed out on publishing the first fractal element antenna article!

And there lies a tale...

I have been asked by QEX (an ARRL publication) to submit a fractal antenna article. I have agreed to consider it under 3 conditions of my request:

1) that the editor suggest a particular design need;
2) that the article be peer reviewed;
3) that the original Feb 1994 manuscript be published as a sidebar.

If these terms are workable, then I will provide QEX with a manuscript at a future date.

Fractal-element antennas are covered by pending and extant patents. Radio amateurs are encouraged to build fractal antennas on their own on an experimental, non-commercial basis.

73,
Chip N1IR

2903. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ca0f05.10691093@news.akorn.net>
Source record: 180095

On 21 Sep 2000 12:02:44 GMT, fractenna@aol.com (Fractenna) wrote:

>Yes. Now we can get back to my comments where this was discussed..
>73
>Chip N1IR

Your earlier comments were:

>You certainly can make a beverage. however, you'll need to keep the antenna as
>straight as you can for best f/b .

That isn't true. Unless the antenna deviates a reasonably large amount from straight line, say twenty degrees, there is very little change in F/B with a "bend" in the wire. F/B ratio is set by the length of the antenna and the termination mismatch, more than any other factor.

Beverages are very non-critical. That is one of their main advantages.

>An inch or two droop isn't a problem for a
>beverage, say, 10 feet off the ground. But a 3 or 4 foot droop is.

That isn't true at all. A three or four foot droop in a Beverage ten feet off the ground results in unnoticable performance change. The claim a Beverage needs to be held "within an inch or two" is totally wrong. That would make a Beverage virtually unbuildable in the real world!

>Also, the
>performance will very much depend on the uniformity of the ground.

Uniformity in what way? Conductivity? Elevation? Texture?

All of that makes very little difference.

73 Tom

2904. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ca1133.11249283@news.akorn.net>
Source record: 180096

On Thu, 21 Sep 2000 08:43:38 -0400, "W4JLE" <w4jle@alltel.net> wrote:

>Nuff said! Even fracky dos not have a fractal antenna...
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000920194528.18611.00000098@ng-cu1.aol.com...
>> I know no one who has a fractal antenna who will now come on this NG.

They are all hanging around with CFA owners and users on
rec.witchcraft.professional.voodooscience

2905. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <_yoy5.798$tl2.81680@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180097

"Fractenna" <fractenna@aol.com> wrote in message
news:20000920050447.22365.00000113@ng-fc1.aol.com...
>
>
> You have me thoroughly confused.
>

I thought this to be the case with your incorrect description of the helically wound antenna. Perhaps my initial description of the antenna was not clear. I thought the most recent description was better. Hopefully this post will clear up this issue for you.

>
> From what I have seen of the two antennas you described, here is my summary.
> Kindly correct me if I am wrong.
>
> 1)You are confusing directivity with gain as your models do not distinguish
> between directivity and gain. Gain is the directivity times the effiicency(
> expressed on a 0 to 1 normalized scale), then converted into dBi --for example.
> [NOTE: the directivity and gain of MI2 at it's lowest resonance are very
> similar; they are within about 1/4 dB.]
>

I do not recall confusing directivity and gain as I am quite clear on the definition of both. When I asked you what the efficiency of the MI2 antenna was, you would not give me an answer. Given this, I simply chose to model the two antenna configurations with lossless wire. This may not be an exact practical representation of either antenna but it does provide a valid baseline for comparison.

From a practical standpoint, I believe this baseline to be valid because both
antennas have the exact same total wire length and the same overall physical aperture. In your statements above, you specifically state that the directivity and gain of the MI2 are within 1/4 dB, so I don't see why this is such an issue for you. You should also note that the other performance characteristics determined from my NEC4 model of the MI2 loop almost identically match the performance characteristics presented in your Comm Quart articles

> 2) You mention a spiral design--which looks like you fit into a 1/8 by 1/8 wave

> form factor, but now is only 5 inches in size on 20M... You ascribe this
> antenna with a directivity that is the same as the MI2--and a higher
radiation
> resistance;note that radiation resistance is the non-ohmic real impedance
at
> the current max...
>

I did not say that the helically wound antenna was only 5 inches in size on 20M. I said that the diameter of the helical winding was about 5 inches and that the total wire
length in the antenna was about 1.5 wavelengths. The new helically wound configuration discussed in this thread is a bit different because I set the total wire length and aperture size to match that of the modeled MI2 loop antenna.

Definition of radiation resistance can be somewhat ambiguous. Your comment regarding radiation resistance and the current max is a text book definition based on relating the total power radiated by the antenna to the maximum current on the antenna structure. Radiation resistance can also be defined at the feedpoint terminals by relating the total power radiated by the antenna to the current at the feedpoint.

In practice, most antenna engineers don't get bogged down in the these definitions. The practical concern is the feedpoint impedance. It is generally acceptable to define the feedpoint resistance as being equal to the radiation resistance plus the loss resistance. The total power available for radiation is in fact the total power delivered to the feedpoint terminals. If the antenna is lossless, then the total power radiated will be the total power delivered to the feedpoint resistance, which then can be defined as the radiation resistance.

When the antenna structure has loss, our concern is really determining the antenna efficiency. We know that Ptotal = Pradiated + Ploss and the efficiency is simply Pradiated/Ptotal. Being consistent with our feedpoint definition of radiation resistance, Ptotal is the total power delivered to the feedpoint resistance, Pradiated is the power delivered to the feedpoint radiation resistance and Ploss is the power delivered to the feedpoint loss resistance.

>
> 3) You talk about an "arbitrarily chosen" random design which you claim
has
> basically equivalent directivity and BW to MI2.
>

This is correct.

> Let me comment on the 3 points.
>
> On (1), I do not know if your models are capable, or include, all
components of

> ohmic loss. IMHO, you should run directivity CORRECTLY and include all
> components of ohmic loss Then you will actually have a directivity.
>

I did run directivity correctly. If I include the component of ohmic loss I will end up with gain. This is the definition. I intend to include ohmic losses in the antenna and re-post the comparisons showing gain.

>
> On (2), you further call this "helically wound". Now I am VERY confused. Is
> this a 3rd antenna?? Are you referring to a flat spiral, or is it something
> else? Surely you do not expect a 3-D COIL to fit into a 2-D form factor...
>

Yes it is a third antenna. I have presented three antennas for discussion in this thread.

One is the MI2 Fractal Loop. The second is an antenna having the exact same wire length and aperture size as the MI2 but configured in a random (non-fractal) shape. NEC and GIF files of these two antennas have been presented to anyone who has asked for them.

The third is a helically wound antenna having the exact same total wire length (within 0.4 m) and aperture size as the MI2 Loop. This helically wound antenna has 16 helical turns on each side of a square perimeter for a total of 64 helical turns. The diameter of the helical turns is 5 inches.

For me, the 2D v 3D nature of the antenna is not an issue.

>
> The flat spiral so described will have a very low radiation resistance and a
> very low directivity. It is very, very electrically small.
>

When you wrote this, you clearly did not understand what I described.

> On (3),I suggest that you do, indeed, publish your random design--as any small
> antenna --the MI2 a prime example-- with 1.9 dBi **directivity** and high
> efficiency is valuable. I do, however, have grave doubts that you have such a
> design, based on your confusion between directivity and gain.
>

Again, there is no confusion on my part regarding directivity and gain.

>
> I would like to give you an opportunity to recant your statement that you have
> an "arbitrarily chosen random design". This is surely wrong.
>

Why would I recant a statement that I believe to be correct?

> This says that one
> may choose any other random design and attain the same result.
>

This is essentially correct. The antennas presented in this thread have the exact same total wire length and aperture size as the MI2 Fractal Loop. The only difference is that the
wire is configured into a random (yet symetrical) shape. The performance of these antennas is not the exact same but it is similar enough to demonstrate that the fractal geometry of the MI2 loop is not the significant factor in ahiveing the described performance.

Just to illustrate the point, I ran another arbitrary shape with the exact same wire length as the MI2 loop (actually it is 11 cm longer - slight mistake) and the exact same aperture size. Performance is as follows:

1st Resonance: 15.389 MHz (MI2 is 15.749 Mhz)
Resonant Resistance: 26.4 ohms (MI2 is 28.4 ohms)
Directivity: 2.18 dBi (MI2 is 2.14 dBi)
2:1 BW: 1.1% (MI2 is 1.27%)

3rd Resonance: 27.863 MHz (MI2 is 28.65 Mhz)
Resonant Resistance: 11.4 ohms (MI2 is 19 ohms)
Directivity: 4.17 dBi (MI2 is 4 dBi)

Not exactly the same but close enough from my perspective of determining the benefits of fractal geometry.

> Is there yet another antenna: ''a "helically wound loop"? Did I miss this?
I
> hope you understand that this is not a 2 D form factor, and cannot meet
the
> rules of the fractal antenna challenge.
>
>73
>Chip N1IR

I really don't care about your fractal antenna challenge.

73
Steve, VE9SRB

2906. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <SAoy5.800$tl2.81412@bgtnsc07-news.ops.worldnet.att.net>
Source record: 180098

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921094601.07865.00000154@ng-da1.aol.com...

> I have been asked by QEX (an ARRL publication) to submit a fractal antenna
> article. I have agreed to consider it under 3 conditions of my request:
>
> 1) that the editor suggest a particular design need;
> 2) that the article be peer reviewed;
> 3) that the original Feb 1994 manuscript be published as a sidebar.
>

I would like to volunteer for the peer review job.

73,
Steve, VE9SRB

2907. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CA193B.31BDC7C1@fgi.net>
Source record: 180099

Yuri
While on one of my working trips to PR4 I stopped
the car at a cut out of a hill with a drop
of a couple of hundred feet with a view of the sea
about a mile away The land is very dry and mainly
coral type rock
. I called CQ and was immediately
inundated with a pile up from Europe, It was terrifying,
I could not hear individual calls and cheated by calling
letters out at random and some always came back.
Went up a mountain top to a rain forest overlooking
the whole island and cound not hear a thing over the static!
Maybe you should rethink the idea of making a better
station because the enjoyment index goes way down.
Art Unwin KB9MZ
Yuri Blanarovich wrote:

> I wonder if there are any practical experiences pointing to the best ground for
> HF for use with vertically polarized arrays.
> The question is what is better, situating the antennas on the beach next to the
> ocean, or is the salt marsh better. Would waves have negative impact on the
> reflective properties of the salt water? Would salt marsh have perhaps more
> salt concentration and be better? Any BC experiences or studies?
> This thread is open :-)
>
> Yuri, K3BU

2908. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921102231.20895.00000204@ng-fe1.aol.com>
Source record: 180100

>
>Only by parking in the sea will you obtain any benefit.
>----
>Reg.
>

Hell, no!
I tried that in Miami Beach, "parked" brand new 85 Cutlass in the salt water, and the water ate the car in about 2 hours, wires disintegrated, engine rusted out. (It was an accident, my first and last time experience with /M/MM :-)

Let's not get off the real question: What is better RF ground (for verticals) ocean front location, or pure salt marsh (not half salt, half sweet etc.), or?

I am aware of salt water vs. inland, etc.
For those who have not seen work, experiences and results of 6Y2A Team Vertical bunch (Force 12) check their page
http://pages.prodigy.net/k2kw/

I am after finding "bestest" salt water conditioned ground and expanding on their work.

Public notice:
Fractenna scientwists opinions are not considered, they are way off the rocker, spare us your diatribes. I want practical experiences - results, measurements and not scientwiphic speculations or computer modelling results before I put on diving suit or galoshes and explore.

Thanks, Yuri, K3BU

2909. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921103326.20895.00000209@ng-fe1.aol.com>
Source record: 180101

>
>All of that makes very little difference.
>
>73 Tom
>
>

Ditto my experiences. I will second W8JI comments/findings, N1IR is off the rocker again with his unfounded statements.
Go away super Troller!

Yuri, K3BU

2910. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921104042.20895.00000210@ng-fe1.aol.com>
Source record: 180102

>
>Thanks Tom! I've gt a big 70 acre field above my house (I'm in a glen).
>I'm in Maryland and that would be due east so I may try laying one out
>some time towards Europe (after the farmer takes tha corn off).
>
>thanks again for taking the time.
>
>Wayne
>N3TNS

One caution when laying out Beverages, if you have sloping hill, it appears that long beverages are counterproductive. I had abt 1500 ft beverages going down the hill and Sloper beat them (that was on 160). Second night I shortened them to 800 ft, ant they were "singing" - day and night difference. Your mileage may vary depending on terrain/ground conditions.

The best killer Beverage I have seen so far is VE1ZZ's NE one, going over the rocks and terminated in the salt water.

GL, Yuri, K3BU, VE1BY

2911. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921104355.20895.00000211@ng-fe1.aol.com>
Source record: 180103

>
>I would like to volunteer for the peer review job.
>
>73,
>Steve, VE9SRB

I would like to see it compared to other similar handicapped antenna at the
antenna test range done by any VHF antenna measuring contest/conference.
The REAL comparisson vs. scientwisting baloney propaganda.

Yuri, VE1BY

2912. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921105437.26631.00000010@ng-ch1.aol.com>
Source record: 180104

>I would like to volunteer for the peer review job.
>
>73,
>Steve, VE9SRB

I'll do better than that: I mail you the MS two weeks before I submit it, and you can comment before it even gets submitted, and get an acknowledgement as well.

I would prefer that peer review be anonymous.

73
Chip N1IR

2913. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921105527.26631.00000011@ng-ch1.aol.com>
Source record: 180105

>
>>
>>I would like to volunteer for the peer review job.
>>
>>73,
>>Steve, VE9SRB
>
>
>I would like to see it compared to other similar handicapped antenna at the
>antenna test range done by any VHF antenna measuring contest/conference.
>The REAL comparisson vs. scientwisting baloney propaganda.
>
>Yuri, VE1BY
>

Who is THIS Yuri? How many 'Yuri's' are there?

NC

2914. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8qd96s$un0$1@nnrp1.deja.com>
Source record: 180106

In article <20000921105437.26631.00000010@ng-ch1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
>
> I would prefer that peer review be anonymous.
>
> 73
> Chip N1IR
>

Why? Because the "peers" you hand-pick would be concealed?

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

2915. 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921111005.26586.00000022@ng-ch1.aol.com>
Source record: 180107

I wish to challenge in the spirit of constructive competition, K1KW and K3BU in the upcoming 10M Contest in December.

The category will be low power, phone only.

Use whatever antennas you want. I will use the 10M Fractal Quad Yagi seen on the ham page of:

http://www.fractenna.com

This antenna provides a unique combination of ease of construction, optimum performance, and dinky form factor. It is NOT MATCHED in performance, simplicty, and reliability by any other such small antenna in that form factor. None.

My objective is to show that the unmitigated bluster from these two individuals is not only silly, but not in the true ham spirit.

SO let's battle it out on the air and may the best operator/antenna combination win!

I've already ordered a voice keyer, and will use my binaural enhancement technology to make up for my declining hearing. Otherwise my operating skills, I betcha, are superior to both K1KW and K3BU, while their vast but wasted antenna farms will not prove useful in helping'em win~! Also, as fewer hams go in the direction of aluminum tubing beanstocks, someone needs to show that SMALL WORKS, FRACTALS WORK, and that the future is now.

What say, Chuck and Yuri?

73,

2916. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921111818.20871.00000235@ng-fe1.aol.com>
Source record: 180108

>
>>I would like to see it compared to other similar handicapped antenna at the
>>antenna test range done by any VHF antenna measuring contest/conference.
>>The REAL comparisson vs. scientwisting baloney propaganda.
>>
>>Yuri, VE1BY
>>
>
>
>Who is THIS Yuri? How many 'Yuri's' are there?
>
>NC
>

There is one Yuri (at this screen name) with many calls, which can be searched and his records speak for themselves. The other two freaky personalities (bada ve1BYm and bada k3BUm) are modelled after Freaktenna "personalities" they are mobile (hard to catch exceeding FCC RF "limits" and I am not responsible for their postings (this is legal public notice).
I hope it really helps to un frac you.

bada BYm, bada BUm

Yuri, P40A (pee farty eh?)
you got problem with this call too?

2917. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA26D8.17D857D3@mindspring.com>
Source record: 180109

Fractenna wrote:

> I wish to challenge in the spirit of constructive competition, K1KW and K3BU in
> the upcoming 10M Contest in December.
>
> The category will be low power, phone only.
>
> Use whatever antennas you want. I will use the 10M Fractal Quad Yagi seen on
> the ham page of:
>
> http://www.fractenna.com
>
> This antenna provides a unique combination of ease of construction, optimum
> performance, and dinky form factor. It is NOT MATCHED in performance,
> simplicty, and reliability by any other such small antenna in that form factor.
> None.
>
> My objective is to show that the unmitigated bluster from these two individuals
> is not only silly, but not in the true ham spirit.
>
> SO let's battle it out on the air and may the best operator/antenna combination
> win!
>
> I've already ordered a voice keyer, and will use my binaural enhancement
> technology to make up for my declining hearing. Otherwise my operating skills,
> I betcha, are superior to both K1KW and K3BU, while their vast but wasted
> antenna farms will not prove useful in helping'em win~! Also, as fewer hams go
> in the direction of aluminum tubing beanstocks, someone needs to show that
> SMALL WORKS, FRACTALS WORK, and that the future is now.
>
> What say, Chuck and Yuri?
>
> 73,

This thread is closed.

2918. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921112757.20871.00000238@ng-fe1.aol.com>
Source record: 180110

>Otherwise my operating skills,
I betcha, are superior to both K1KW and K3BU, while their vast but wasted antenna farms will not prove useful in helping'em win~!
>What say, Chuck and Yuri?
>
>73,
>

More crap and lies from Freak. Where is the proof fo your "superior" skill?
Name one record in the contest Troller?

Yuri outgrew QRP, low power, handicapped categories. Unless paralyzed by equipment or customs problems, he always goes with big boys, after world or other records. He will not lower himself to Freak's level of "competition".
Yuri is in pursuit of pushing the limits on the antenna, equipment and operating front and in setting the records to be the best of the best.
You want to compete on my level? You are welcome! Wanna make a bet you chicken?
You would be stomped with your Fractal N. Crap!

Go away!

Yuri, VC1A

2919. Re: Scientist Challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000921112856.20871.00000239@ng-fe1.aol.com>
Source record: 180111

>
>Some years ago I saw a pair of graphs which "proved" that the increase
>in lung cancer in women was exactly correlated with the increase in
>sales of nylon stockings. As Bill Clinton knows, you can prove or
>disprove anything.
>
>73, Bill W7TI
>
>

And they are trying to blame it on RF exposure!!!

Yuri

2920. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921112935.26631.00000019@ng-ch1.aol.com>
Source record: 180112

>
>>
>>>I would like to see it compared to other similar handicapped antenna at the
>>>antenna test range done by any VHF antenna measuring contest/conference.
>>>The REAL comparisson vs. scientwisting baloney propaganda.
>>>
>>>Yuri, VE1BY
>>>
>>
>>
>>Who is THIS Yuri? How many 'Yuri's' are there?
>>
>>NC
>>
>
>There is one Yuri (at this screen name) with many calls, which can be
>searched
>and his records speak for themselves. The other two freaky personalities
>(bada
>ve1BYm and bada k3BUm) are modelled after Freaktenna "personalities" they are
>mobile (hard to catch exceeding FCC RF "limits" and I am not responsible for
>their postings (this is legal public notice).
>I hope it really helps to un frac you.
>
>bada BYm, bada BUm
>
>Yuri, P40A (pee farty eh?)
>you got problem with this call too?
>

I think you are full of hot air. Use it to compete with me in the 10M contest
and do something constructive with it.

Or are you SCARED to compete against me?

73
Chip N1IR

2921. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000921113356.26631.00000021@ng-ch1.aol.com>
Source record: 180113

>
>>Otherwise my operating skills,
>I betcha, are superior to both K1KW and K3BU, while their vast but wasted
>antenna farms will not prove useful in helping'em win~!
>>What say, Chuck and Yuri?
>>
>>73,
>>
>
>More crap and lies from Freak. Where is the proof fo your "superior" skill?
>Name one record in the contest Troller?
>
>Yuri outgrew QRP, low power, handicapped categories. Unless paralyzed by
>equipment or customs problems, he always goes with big boys, after world or
>other records. He will not lower himself to Freak's level of "competition".
>Yuri is in pursuit of pushing the limits on the antenna, equipment and
>operating front and in setting the records to be the best of the best.
>You want to compete on my level? You are welcome! Wanna make a bet you
>chicken?
>You would be stomped with your Fractal N. Crap!
>
>Go away!
>
>Yuri, VC1A
>

So what you are saying is that you feel that you are so superior that you feel threatened by this 'nobody' with a fractal antenna??

That, is, someone who you are convinced cannot beat you in a contest (because he can't operate?) and with an antenna that can't posibly work? Seems to me you are a WEE BIT unrealistic..not to mention insulting to thousands of other hams.

Or is it just that you can't condescend to compete with someone who represents a more realistic cross section of HF operators?

Explain that (this should be juicy news going through the grapevine!)!

We really want to know:-)

73
Chip N1IR

2922. Re: DOWNLOAD YOUR FREE TRIAL VERSION OF POSTAGENT!! 1817

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <WizKOS1PvIzPeUEqyfbxFmnI6gWK@4ax.com>
Source record: 180114

postagent@worldnet.att.net wrote:

>What if you could reach a world-wide audience in an instant? You can with PostAgent!
>Turn your computer into a large scale Usenet news posting machine and Nuke the Competition with PostAgent!!
>Use it to maximize the exposure of your ideas or products on the newsgroups!!!

Personally, I don't think we need any software designed especially for
spamming newsgroups worldwide.

Thanks, but no thanks.

Bob
k5qwg

>
>Download your FREE trial version of PostAgent NOW and start promoting your business on the net.
>
>PLEASE VISIT http://www.postagent.com/default.asp?fromAgentID=2084 for more information.
>
>
>
>
>
>
>
>jouwnnssnrmjfuuojdilmzmwotofpyzucximojs

2923. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CA2B03.898FC252@mindspring.com>
Source record: 180115

Fractenna wrote:

> >
> >>Otherwise my operating skills,
> >I betcha, are superior to both K1KW and K3BU, while their vast but wasted
> >antenna farms will not prove useful in helping'em win~!
> >>What say, Chuck and Yuri?
> >>
> >>73,
> >>
> >
> >More crap and lies from Freak. Where is the proof fo your "superior" skill?
> >Name one record in the contest Troller?
> >
> >Yuri outgrew QRP, low power, handicapped categories. Unless paralyzed by
> >equipment or customs problems, he always goes with big boys, after world or
> >other records. He will not lower himself to Freak's level of "competition".
> >Yuri is in pursuit of pushing the limits on the antenna, equipment and
> >operating front and in setting the records to be the best of the best.
> >You want to compete on my level? You are welcome! Wanna make a bet you
> >chicken?
> >You would be stomped with your Fractal N. Crap!
> >
> >Go away!
> >
> >Yuri, VC1A
> >
>
> So what you are saying is that you feel that you are so superior that you feel
> threatened by this 'nobody' with a fractal antenna??
>
> That, is, someone who you are convinced cannot beat you in a contest (because
> he can't operate?) and with an antenna that can't posibly work? Seems to me you
> are a WEE BIT unrealistic..not to mention insulting to thousands of other hams.
>
> Or is it just that you can't condescend to compete with someone who represents
> a more realistic cross section of HF operators?
>
> Explain that (this should be juicy news going through the grapevine!)!
>
> We really want to know:-)
>
> 73
> Chip N1IR

This thread is closed.

2924. Re: Crazy? Receiving antenna experiment

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <4778-39CA12BF-1@storefull-111.iap.bryant.webtv.net>
Source record: 180116

Curt Breneman wrote:
"We can`t compare a long wire a large fraction of a wavelength above earth to a Beverage .05 WL or less above earth!"

Depends on earth composition under the wire. Some is like glass. Some is like salt marsh. Most is in-between.

The function of a radio antenna is to launch or capture a signal well. Directivity is often desired. Directivity concentrates a transmitted signal which increases the effective radiated power. Directivity concentrates received carrier power (reciprocity prevails) which improves signal to noise ratio.

Wavelengths which are long when compared with our surroundings require large antennas to produce directionality. At the longer wavelengths (lower frequencies) the Beverage antenna has proved economical and effective, especially for receiving, where efficiency is not so important.

The Beverage is directionally effective, economical, and easy to build and maintain. Like most effective antennas, it requires a lot of space. It is especially competitive at low frequencies where many alternatives become extremely large and usually require a lot of height as well as horizontal space.

Best regards, Richard Harrison, KB5WZI

2925. Re: Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11822-39CA2397-28@storefull-118.iap.bryant.webtv.net>
Source record: 180117

Jason, KB9PNZ wrote:
"Does anyone have the formula?"

Yes, but it`s too involved to relate in this thread.
Cet a copy of "Radio-Electronic Transmission Fundamentals" by B.
Whitfield Griffith, Jr., Library of Congress Catalog Card Number:
61-13756. Chapter 48 is titled: "The Field of Two Antennas". It does not
disappoint.

Best regards, Richard Harrison, KB5WZI

2926. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qdao3$6nq$1@uranium.btinternet.com>
Source record: 180118

For all antennas, especially low verticals, the lower the ground resistivity the smaller the power lost in the ground. (Unless, of course, resistivity is so high it is becoming an insulator.)

Ground resistivity is determined mainly by its water content and by the salts disolved in the water.

Salt sea water has the lowest resistivity of 0.22 ohm-metres. It can be considered lossless when only a very few radials or a plate is immersed in it. Suppose the loss resistance is 0.1 ohms underneath a 1/4-wave vertical having a radiation resistance of 37 ohms. Radiating efficiency will be 99.73 percent.

Now dilute the salt sea water with an equal amount of marsh water such that the resistivity doubles. The loss resistance will also double and radiating efficiency will fall to 99.46 percent. But what's a difference in signal strength of 0.0117 decibels between friends. It's only about 1/500th of an S-unit.

In summary, if the water tastes salty, wherever you are you are well on the way to winning the contest. Just don't drink too much of the filthy stuff.
--

Regards from Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

Yuri Blanarovich <k3bu@aol.com> wrote in message news:20000921102231.20895.00000204@ng-fe1.aol.com...
> >
> >Only by parking in the sea will you obtain any benefit.
> >----
> >Reg.
> >
>
> Hell, no!
> I tried that in Miami Beach, "parked" brand new 85 Cutlass in the salt water,
> and the water ate the car in about 2 hours, wires disintegrated, engine rusted
> out. (It was an accident, my first and last time experience with /M/MM :-)

>
> Let's not get off the real question: What is better RF
ground (for verticals)
> ocean front location, or pure salt marsh (not half salt,
half sweet etc.), or?
>
> I am aware of salt water vs. inland, etc.
> For those who have not seen work, experiences and results
of 6Y2A Team Vertical
> bunch (Force 12) check their page
> http://pages.prodigy.net/k2kw/
>
> I am after finding "bestest" salt water conditioned ground
and expanding on
> their work.
>
> Public notice:
> Fractenna scientwists opinions are not considered, they
are way off the rocker,
> spare us your diatribes. I want practical experiences -
results, measurements
> and not scientwiphic speculations or computer modelling
results before I put
> on diving suit or galoshes and explore.
>
> Thanks, Yuri, K3BU

2927. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-21 23:16:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qe4p7sed1@neptunium.btinternet.com>
Source record: 179895

```
> DO NOT RESPOND TO TROLLS!
============================
This begs the question "How does one recognise a troll ?"
```

2928. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:05:24 UTC
From: fractenna@aol.com
Message-ID: <20000921200524.08038.00000089@ng-cd1.aol.com>
Source record: 179896

>
>On Thu, 21 Sep 2000 15:13:33 -0700, Jim Kelley <jwkelley@uci.edu>
>wrote:
>
>>
>>
>>Fractenna wrote:
>>> BTW, THIS THREAD IS CLOSED.
>>>
>>> NC
>>
>>Is a closed thread anything like a closed loop? Sure seems like it.
>>
>>xg
>
>Hi Jim,
>
>You are off topic if that loop is not confined to eighth wave
>dimensions!
>
>73's
>Richard Clark, KB7QHC
>
>
>
>
>
>

This thread is closed.

NC

2929. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:11:51 UTC
From: fractenna@aol.com
Message-ID: <20000921201151.08038.00000092@ng-cd1.aol.com>
Source record: 179897

>
>"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
>news:Eiwy5.736$u95.2384934@news.ntplx.net...
>> VE9SRB <srbest@worldnet.att.net> wrote:
>>
>> I think that his antenna has yours beat in "ease of construction," Steve,
>so
>> if the gain is equal, his combination is still better than yours. I would
>> find it easier to cut a mess of PVC to the same size and glue them all
>> together than to cut them to random sizes.
>>
>> 73,
>> Ed Hare, W1RFI
>>
>
>Ed:
>
>I assumed you looked at the EZNEC files - is this true?
>
>With the MI2 loop, you would need to cut 100 sections. They may not all be
>the same size (I would need to see his model).
>
>With mine you would need to cut 84 sections. They are not all the same
>length.
>
>Now take a look at the number of wire bends if you were making either
>antenna out of a single piece of wire.
>
>Also, ease of construction has not been my issue. The relative performance
>and the merits of the fractal geometry have been my issue. When I look at
>either antenna, I do not think either offer the claim of "ease of
>construction"
>
>73,
>Steve, VE9SRB
>
>

What CUTS?!

This is a LOOP. All you do is BEND the wire. If hams can't do this, then let me turn in my license....

Last one I did took ten minutes to make with a block so described.

Some people just make'em out of copper tubing and hang'em from their porches--with NO SUPPORTS.

Frankly, you only require one or two supports per arm.

Steve, do you REALLY understand what the heck this antenna is ABOUT?? have you LOOKED at the WEB SITE?

http://www.fractenna.com/ham/hampage1.html

How can you possibly make such silly statements if you've looked at it?

Or, like the 'squirrel run' loop you described--with 5 inch piping (!!!))--, is this ANOTHER joke?

73
Chip N1IR

2930. Re: 10M CONTEST CHALLENGE: K1KW, K3BU

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:14:33 UTC
From: fractenna@aol.com
Message-ID: <20000921201433.08038.00000093@ng-cd1.aol.com>
Source record: 179898

>
>
>
>Fractenna wrote:
>> This thread is about honest, good operatin' great antenna competition!
>>
>> We should have ALL thought of it sooner!
>
>Seems there's a contest just about every other weekend. I think sombody
>already did think of it. You could participate in one of them, and
>compare your score to the other participants scores. How about that for
>an idea?
>
>73, Jim AC6XG
>

Hi Jim,

Well, 10M is the best place to put the FQY through its paces, and 10 hasn't been open much til recently this season.. The 10M contest in December is a wonderful chance to show its stuff! Besides, it's the weekend before finals so I have it off!

Yuri and Chuck both op on 10M and can thus best attempt to beat me.

They won't!

:-)

73
Chip N1IR

2931. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:15:34 UTC
From: fractenna@aol.com
Message-ID: <20000921201534.08038.00000094@ng-cd1.aol.com>
Source record: 179899

```
>
>"Bullcrap" ?? You are the biggest author of bullcrap on this
>ng. You do not have a *humble* opinion. You have the
>unmitigated arrogance to deem something unworthy of this
>ng?
>
>The fact is, your mind is closed.
>
>
>
>Fractenna wrote:
>
>> >Fractenna,
>> >
>> >I posted two questions. By your reply, you have categorized
>> >questions as "stupid idiotic crap". No one who categorizes
>> >questions as "stupid idiotic crap" is helping hams out. Kudos,
>> >like respect, are earned. Fractenna has done NOTHING on
>> >this ng to earn either.
>> >
>> >I await Dino's answer to those questions.
>> >
>> >Fractenna wrote:
>> >
>> >> >Dino wrote:
>> >> >
>> >> >> Maybe not, but the antenna works...and you can't argue that.
>> >> >
>> >> >What makes you say the antenna "works", and what do you
>> >> >mean by "works"?
>> >> >
>> >> >Have you used a 10 M - or other ham band - fractal antenna?
>> >> >
>> >> >> Dino
>> >> >>
>> >>
>> >> Look at the ham page
>> >>
>> >> http://www.fractenna.com/ham/hampage1.html
>> >>
>> >> and be a goody dooby and tell us what is wrong or misleading or just
>plain
>> >> inaccurate about the performance the relative advantages or anything
>else.
```

>> >> Go ahead and do everyone a favor and tell them what is wrong.
>> >>
>> >> From what I've seen of other ham antenna web pages this is perhaps the
>best
>> >> documented antenna from a performnace and modeling standpoint on the
>web.
>> >>
>> >> Dr. Cohen should be getting major kudos for helping hams out. Not stupid
>> >> idiotic crap like this from a few jerks.
>> >>
>> >> Phil
>> >> de N1ZKT
>> >
>>
>> Fractenna is not a person.
>>
>> I don't agree with Phil's word choice, but your comments are not worthy
>of
>> this NG IMHO.
>>
>> I know no one who has a fractal antenna who will now come on this NG. They
>> have, rightly so, left it to me.
>>
>> They just don't want the bullcrap from a few malcontents.
>>
>> Don't blame'em.
>>
>> Chip N1IR
>

Do you have a name, sir?

73
Chip N1IR

2932. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:16:07 UTC
From: fractenna@aol.com
Message-ID: <20000921201607.08038.00000095@ng-cd1.aol.com>
Source record: 179900

```
>
>ANSWER the question: where do you find a complaint
>in the questions?
>
>Fractenna wrote:
>
>> >Chip,
>> >
>> >Where do you find a complaint in the questions?
>> >
>> >Fractenna wrote:
>> >
>> >> >What makes you say the antenna "works", and what do you
>> >> >mean by "works"?
>> >> >
>> >> >Have you used a 10 M - or other ham band - fractal antenna?
>> >> >
>> >> >> Dino
>> >> >>
>> >> >
>> >
>> >> Either stop complaining or give something concrete that can be
>discussed.
>> >>
>> >> 73
>> >> Chip N1IR
>> >
>> >
>>
>> Who are you?
>>
>> NC
>
>
>
>
>
>
>

Who are you?

NC
```

2933. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:20:25 UTC
From: fractenna@aol.com
Message-ID: <20000921202025.08038.00000096@ng-cd1.aol.com>
Source record: 179901

>Fractenna wrote:
>> Believe me; peer reviewing is no biggie. If done, all that is needed is a
>> statement in the acknowledgement that the article was peer reviewed.
>
>As I'm sure you're aware, an article does not get published in a peer
>reviewed scientific journal unless and until all of the concerns and
>questions raised by the reviewers have been addressed to their
>satisfaction in the article. That's what 'peer reviewed' usually
>means. It means you basically place yourself at the mercy of the
>reviewers. Is this what you're suggesting?
>
>73, AC6XG
>

No. I am suggesting that peer reviewers do the job they volunteered to do.
There is no' mercy' involved.

I have long benefited from peer review critiiiiiiques. Omce in a whoile you get
one that's off the wall, but what usually happens then is that person isn't
sent any more MS' to look at....

Sure! Why NOT peer review! Just recognize that a former TV repairman with no
publishing record does not a peer make--for a theoretical counter example.

73
Chip N1IR

2934. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:49:09 UTC
From: k1bqt@aol.com
Message-ID: <20000921204909.24678.00000176@ng-cu1.aol.com>
Source record: 179902

>Not much antenna humor around:-)<

Sure there is--your present elevated state is positively entertaining! Look out though, Tom may be lurking wearing nothing but a velour thong --waiting to leap out and get you with his big hairy paws! Someone dial 911, here he comes!

73

Rick K1BQT

2935. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:55:31 UTC
From: fractenna@aol.com
Message-ID: <20000921205531.18334.00000274@ng-fl1.aol.com>
Source record: 179903

BTW, if you look closely on page 20 of Oct QST, you'll see one of Sara's MI2 elements on the picture of her science fair display:-)

Then again, I always knew MI2 was a winner...:-)

73
Chip N1IR

2936. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 00:59:23 UTC
From: k3bu@aol.com
Message-ID: <20000921205923.14628.00000232@ng-fq1.aol.com>
Source record: 179904

>
>The point is you are not likely to find a natural saline concentration
>on earth which is significantly better as a conductor than sea water.
>
>Best regards, Richard Harrison, KB5WZI
>
>

Dead Sea? Salt Lake?

OK, I gather that salt water vs. salt water marsh is very close, perhaps indistinguishible. Still, I don't see any practical experiences or measurements. Next time I will go to the ocean and marsh area I will try to do some measurements and try to correlate salinity vs. depth of RF penetration. Any known and proven method of doing that? Perhaps ferrite rod antenna?

Thanks!

Yuri, K3BU

2937. mulit band dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:01:52 UTC
From: ka4oww@earthlink.net
Message-ID: <39caadee.44817071@news.earthlink.net>
Source record: 179905

I am planning to build a multiband dipole like the AlpahDelta.
Is there any reason that I can not feed a
40mtr,20mtr,18,mtr,12mtr,10mtr with a single feed line?

I have a a small lot and need to have something on hf.
I also plan on installing a gap vertical by the spring.
The rig is IC 746 .

the other question could i use the same support poles for the abvoe
mentioned bands if I were to build a sky loop.
thank you
Jay Mason
ka4oww

2938. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:20:26 UTC
From: fractenna@aol.com
Message-ID: <20000921212026.01893.00000185@ng-fl1.aol.com>
Source record: 179906

>et>
>
>On Thu, 21 Sep 2000 23:05:56 GMT, "VE9SRB" <srbest@worldnet.att.net>
>Wrote:
>>Also, ease of construction has not been my issue. The relative performance
>>and the merits of the fractal geometry have been my issue. When I look at
>>either antenna, I do not think either offer the claim of "ease of
>>construction"
>>73,
>>Steve, VE9SRB
>
>
>Ed and Steve, let me fill you in on this a bit,
>
>Some consider all the Fractenna posts as "trolling", others have other
>names for it, but the result is very little technical information is
>exchanged in direct discussions with Fractenna.
>
>The technical information rate, as a percentage of newsgroup time or
>kb of file size, is about as low as it gets. But maybe I can speed the
>exchange up a bit in this thread.
>
>What I have gathered out of years of seriously trying to understand
>what Chip brings to the table... is this:
>
>The general idea offered is form before function. Chip claims fractals
>have some unique property that, when used in an antenna and optimized,
>makes them "unbeatable".
>
>The design system works this way. The "designer" keeps trying random
>fractal shapes and eventually hits one that sort of fits an
>application. The designer then uses a computer to refine the shape
>through a series of trial and error changes until the "form" winds up
>as good as it can get within certain guidelines.
>
>So far, this has been the technical limit of what has been offered to
>this group, and to our fraternity.
>
>If you think about what you are not involved with, it disproving his
>claim that he has optimized the antenna for a certain set of
>parameters.....and that you can't change his design to make it any
>better (he hides his desin to prevent that).
>
>As you all know, the way product engineering normally works is the

>designer looks at all other past solutions in detail and takes the
>"good things" from each. You can't do that, because the original
>design you are supposed to beat is hidden.
>
>The gurantee of not solving this conumdrum revolves around the fact a
>hidden design sets the parameters or limits, and you have to handle
>the problem the long way and find something that fits guidelines
>formed around the "hidden" solution.
>
>When a particular device already defined sets the limits (form before
>function), it really is difficult to find something that "beats" that
>device in all parameters. It is time consuming, and there is no reward
>except the satisfaction of deflating an ego that is intentionally
>designed to cry for a sharp pin-prick.
>
>For example, Steve suggested one antenna as a small helix formed in a
>larger loop and Chip sneered at it. The only reason that can happen is
>Chip set the guidelines around an antenna that he randomly stumbled
>upon, and refined through trial and error. Where that antenna "wound
>up" is where the goal has been set, and Steve has to engineer a
>solution to an equation written by a monkey at a typewriter.
>
>If we change one parameter, like say the frequency, and move it to
>somewhere in mid-VHF...suddenly Steve's helical loop has huge
>mechanical advantages. It could be automatically manufactured out of
>one piece of conductor, and self support. Tooling would be cheap, it
>would be easy to tune. If we used Steve's loop, and designed the
>guidelines around it, Chip would have a difficult if not impossible
>time beating the loop. Unfortunately, the troll sets the guidelines.
>
>We can do that with almost any antenna, there is no magic in any of
>this. When form preceeds and defines all the parameters, it's
>difficult to design someting else to "beat it".
>
>In the long scheme of things this entire fractal thing is totally
>meaningless. No one will lean how an antenna radiates, no one will
>learn how to fill a defined set of parameters, and we certainly won't
>learn how to be gentleman or helpful to each other.
>
>With all this considered, the only conclusion I can reach is this is
>all a giant time wasting troll. We all could be doing more productive
>things.
>
>73 Tom
>
>
>
>
>
>

Readers be so advised:

Thomas Rauch , W8JI, is in the process of being sued for libel by me. For several months now, he has harassed me with no provocation to him.

Recently he has made a death threat to me. He has also been threatening with public statements that he will disrupt my public appearances. This coupled with his death threat has made it impossible for me to address any gatherings of radio amateurs in the future, and I have already canceled and turned down 3 appearances recently.

Keep that in mind the next time you want to hear from an authority at Dayton, for example.

I have already received 4 e-mails asking' What's wrong (one said "Dr. ASSHOLE") with Tom's comments?'.

Some radio amateurs may pretend that fractal antennas are some lunatic technology within their sole purview. In fact, the situation is quite the opposite. Over a 100 fractal -element antenna articles have ben published since I started this field in 1988. Fractal Antenna Systems, Inc., which holds the IP on the technology, is undergrowing rapid growth to keep up with demand. Finally, as we can see from a very recent example in Octber QST (KE6MWX's) stellar peformance in teh California State Science fair).

And yes; hams have built'em and use'em.

My latest tally is over 1000. There are likely many others that i don't hear about.

I have always been very helpful in answering fractal antenna questions. The fact that I do not do so HERE anymore is solely because of a few individuals, who will resort to no restraint whatsoever, even and including death threats.

It is important to realize that any and all of these individuals could have asked these questions on a moderated list--the fractal antenna reflector at

fractalantenna-subscribe@egroups.com

In fact, the fractal antenna reflector is now at its largest average subscriber size since its inception in January 1999.

I will, for the first time in 9 months, quote from a Thomas Rauch post at others' requests.

>The design system works this way. The "designer" keeps trying random
>fractal shapes and eventually hits one that sort of fits an
>application. The designer then uses a computer to refine the shape
>through a series of trial and error changes until the "form" winds up
>as good as it can get within certain guidelines.
>

This is essentially correct. And I am very proud of the work and toil I have put into this to make it work.

In fact, computers do this job now. They use a 'guided trial and error' process of optimization which works almost exactly in this way. It is called GENETIC ALGORITHM ANTENNA OPTIMIZATION. In the past few years it has become the premier means of coming up with better antenna designs.

In fact, Bob Hohlfeld and I have just put the finishing touches on fractal-coded genetic algroithm optimzation software for antennas.

But I am hardly taking credit for such optimzation approaches. They were pioneered--with a different optimzation algorithm-- by Landstorfer and Sacher, who arrived at OPTIMUM antenna shapes which we now know are RANDOM FRACTALS, and so identified in my pioneering 1995 paper on fractal antennas..

Even their book says it all:

OPTIMIZATION OF WIRE ANTENNAS published in 1985. First work reported right here in Boston in 1976!

I understand that former TV repairmen with no publishing records--who live in rural states with no easy library access, may be terribly frustrated that younger people are pulling the world out from under them--technically speaking--but that's the way its gone.

The REAL question is: what RIGHT does this former TV repairman with no publishing record HAVE to 1) harass and libel; 2) threaten my life?

Don't be diverted: I am not.

Nathan Cohen, Ph.D.

2939. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:21:21 UTC
From: fractenna@aol.com
Message-ID: <20000921212121.01893.00000186@ng-fl1.aol.com>
Source record: 179907

>Fractenna <fractenna@aol.com> babbled several times, not knowing how things
>work in the real world:
>>>
>>>ANSWER the question: where do you find a complaint
>>>in the questions?
>>>
>>>Fractenna wrote:
>>>
>>>> >Chip,
>>>> >
>>>> >Where do you find a complaint in the questions?
>>>> >
>>>> >Fractenna wrote:
>>>> >
>>>> >> >What makes you say the antenna "works", and what do you
>>>> >> >mean by "works"?
>>>> >> >
>>>> >> >Have you used a 10 M - or other ham band - fractal antenna?
>>>> >> >
>>>> >> >> Dino
>>>> >> >>
>>>> >> >
>>>> >
>>>> >> Either stop complaining or give something concrete that can be
>>>discussed.
>>>> >>
>>>> >> 73
>>>> >> Chip N1IR
>>>> >
>>>> >
>>>>
>>>> Who are you?
>>>>
>>>> NC
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>
>> Who are you?
>

>> NC
>
>ehsjr@bellatlantic.net, can't you read?
>
>Most places only have one individual behind an account name.
>
>Jim Pennino
>
>
>
>
>
>
>
>
>

Who is he, Jim?

73
Chip N1IR

2940. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:27:47 UTC
From: w1rfi@aol.com
Message-ID: <20000921212747.08062.00000088@ng-cd1.aol.com>
Source record: 179908

>From: fractenna@aol.com (Fractenna)

>>If Chip would use the same process to write his article as I use for mine,
>>he will send a copy to his "hand picked" peers, who will give Chip feedback
>>that will make his article more accurate and useful.

>I have done this for 70 articles. Why would i stop now?

Exactly the point I was making, Chip; sending articles to ones colleagues is a normal and accepted process. I raised the issue to point out that the implication that there was something underhanded in your wish for peer review was a false one.

My choice of the word "would" in the paragraph was not intended to say that would not.

73,
Ed Hare, W1RFI

2941. HF2V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:37:44 UTC
From: w2wx@aol.com
Message-ID: <20000921213744.03661.00000149@ng-fg1.aol.com>
Source record: 179909

Anyone with experience with the HF2V roof mounted? How is the performance?
How about mounting and radials?

Thanks,

Steve, W2WX

2942. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:47:21 UTC
From: fractenna@aol.com
Message-ID: <20000921214721.25790.00000298@ng-mg1.aol.com>
Source record: 179910

>>From: fractenna@aol.com (Fractenna)
>
>>>If Chip would use the same process to write his article as I use for mine,
>>>he will send a copy to his "hand picked" peers, who will give Chip feedback
>>>that will make his article more accurate and useful.
>
>>I have done this for 70 articles. Why would i stop now?
>
>Exactly the point I was making, Chip; sending articles to ones colleagues is
>a
>normal and accepted process. I raised the issue to point out that the
>implication that there was something underhanded in your wish for peer review
>was a false one.
>
>My choice of the word "would" in the paragraph was not intended to say that
>would not.
>
>73,
>Ed Hare, W1RFI

Anyone who would avoid feedback on a scientific MS is a fool.

Peter 'O' (PO) Brackett wants to know who was/will review my latest SETI manuscripts before they are published.

That's easy: Frank Drake.

The last thing I would do is publish something wrong and embarassing in a proceedings in honor of him.

Watta guy!

73
Chip N1IR

2943. Re: FRACTAL QUAD YAGI: 10m DXCC 310!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:50:00 UTC
From: w1rfi@aol.com
Message-ID: <20000921215000.04994.00000195@ng-fc1.aol.com>
Source record: 179911

>From: 2w8ji@contesting.com (Tom W8JI)

>I guess there is so much noise accompanying the good data that it gets
>lost in the background. Thank's for reminding us Ed.

What has been unfortunate about some of the noise, Tom, is that those who come to this forum as readers to learn more about antennas will learn things wrong by reading the noise.

I can tell that there are some who don't like Chip, but expressing that dislike by some of the incorrect things I have seen said about his antenna design does more than get his goat -- it confuses the newcomer who really is trying to understand antennas.

I don't always succeed, but I try my darndest to keep my personal feelings about someone and my technical discussions separate. And if we want to discuss our personal feelings, rec.radio.amateur.antenna is not the newsgroup chartered for that sort of thing. :-)

Just a bit of explanation about my posting style. :-)
73,
Ed Hare, W1RFI

2944. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:52:58 UTC
From: MC 10kW Jesus <qsl27@hotmail.com>
Message-ID: <39CABC6E.77574C3A@hotmail.com>
Source record: 179912

Tom W8JI wrote:
>
> On 08 Sep 2000 12:04:16 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >It is impossible to get a high radiation resistance at the current max without
> >duplicate current max's. See what happens to yours. Then notice how much wire
> >you've got; isn't it of order 5 or 6 wavelengths? The MI2 uses about 1 1/2
> >waves of wire.
>
> Chip has some odd notion the more wire you pack into a given spatial
> volume, the higher efficiency and radiation resistance is.
>
> He doesn't know light bulbs and electric heaters use his theory for
> increased radiation resistance....of course it's mostly in the form of
> thermal radiation.
>
> 73 Tom

Chip eats urinal cakes.

2945. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 01:53:56 UTC
From: w1rfi@aol.com
Message-ID: <20000921215356.04994.00000197@ng-fc1.aol.com>
Source record: 179913

>From: "VE9SRB"

>When I asked you what the efficiency of the MI2 antenna
>was, you would not give me an answer.

Do I not recall, either from a post or his Web page, that the efficiency is
85%?

73,
Ed Hare, W1RFI

2946. Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 03:01:43 UTC
From: jnrv1978@aol.com
Message-ID: <20000921230143.13454.00000111@ng-cf1.aol.com>
Source record: 179914

I am just getting my first HF rig and am trying to decide what to get for an antenna. I am on a really tight budget so some things are out. I have been looking at the broadband folded dipole by B&W. I like the fact that it won't require a tuner. A couple of questions please. What do you think of this antenna? Does it tend to be directional? Which way is the best to use it, as an inverted V, flat, or sloper? Do you have any other suggestions for antennas? I live in west central South Carolina. Thanks for the read! Jon.

2947. Re: EZNEC model of MI2 Fractal Loop versus Random Geometry (GAIN)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 03:26:49 UTC
From: k1bqt@aol.com
Message-ID: <20000921232649.19912.00000019@ng-mf1.aol.com>
Source record: 179915

>The REAL question is: what RIGHT does this former TV repairman with no publishing record HAVE to 1) harass...

Not to be critical, but perhaps you'll explain for us why, in a public forum, Tom doesn't retain the right to question, challenge, and even make fun of you? Did you hesitate to mock Steve today? Do you have "special" rights others lack? Speaking of special, if publication count conveys privlege, you may relax and stand down. I have many more credits than you (starting in 1969), and so do several others on here. Hope that takes some pressure off.

>and libel<

You and your fractenna frat party have libeled many on here--viciously, repeatedly, and over a long period of time. So what? Am I suing you? Should I?

> 2) threaten my life?<

It would be extrodinarily easy to demonstate to any assembled panel of reasonable persons how your posts show an ongoing pattern of volatile and predacious retaliatory behavior laced with personal venom, libel, legal threats, false accusations, and even attempts to misuse police action. The truth is, nobody ever threatened on your life on here--and likely never will (it's a serious federal offense).

Personally, though, I'm a little worried about what you might attempt as a result of your pattern of making false claims--and so is my wife. Psychologists call it projection.

>Don't be diverted: I am not.<

Thank you. Every dipstick deserves a little oil.

73

Rick K1BQT

2948. US-AZ-Senior RF Engineer (Antenna Design, 20 Positions)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 03:27:24 UTC
From: Dave Moen <dmoen@mac.com>
Message-ID: <B5F01DA9.2155%dmoen@mac.com>
Source record: 179916

Leading Phoenix, Arizona based company is hiring 20 Senior RF Engineers for full time positions.

The company is willing to relocate candidates but, will give a preference for Phoenix, Arizona based candidates.

Please, forward your resume with contact information for consideration to davemoen@mac.com

Will forward the job descriptions ASAP, as these positions just opened today the job descriptions will not be complete until later this afternoon.

2949. Re: Chirp's Frektal Chilli Contesting

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 03:56:34 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CAD91A.D3F24DF2@bellatlantic.net>
Source record: 179917

How'd you get Chirp to pose for that picture?

Mark Keith wrote:

> Yuri Blanarovich wrote:
>
> >
> > And he has the guts to challenge people to contests?
> > I hope this helps to put CHIRP in proper light.
> > (With apology to original writer.)
> >
> > bada BUm
>
> I almost wet my pants reading that one...But seriously that all stems
> from the lack of a suitable diet when a youngster. All Texans are fed
> the right beginning foods at an early age. No strained cabbage, carrots,
> beets for us. Noooooooooooo....We start off right with this:
> http://web.wt.net/~nm5k/texbfood.jpg
>
> MK
> --
> http://web.wt.net/~nm5k

2950. Butterfly beam

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-22 04:19:11 UTC
From: Mark Flanagan <markf@cshore.com>
Message-ID: <sslnig8pos8s3a@corp.supernews.com>
Source record: 179918

Hi,

I've aquired a Butternut Butterfly Beam from an estate. No paperwork, of course. Does anyone have manual they could copy or know where I can order a copy? I understand that Butternut was bought out last year by MFJ, isn't that wonderful!

--
Mark Flanagan, K1MKF
k1mkf@qsl.net
http://www.qsl.net/k1mkf/

2951. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000923154233.27163.00000466@ng-fm1.aol.com>
Source record: 179819

>
>>Did you do this box?It's pretty good but the buttons drive me nits. No RF
>feedback at all.<
>
>You can thank W8JI for the lack of RF feedback and groundloops (plus several
>other design saves),

OK

THANKS TO W8JI FOR NO RFI

me for the manual,

THANKS FOR THE MANUAL (reasonably clear at least)

and the purchasing agent for the
>nitty
>switches.

NO THANKS TO THE PURCHASING AGENT.

73
Chip N1IR

>Rick K1BQT
>

2952. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <aoupsscf3e18qd8kr557tspjq0vt50tb4b@4ax.com>
Source record: 179820

On Sat, 23 Sep 2000 16:19:33 +0100, "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
>What is the conductivity of ordinary high strength
>structural concrete ? What is the permittivity ?

It varies depending on the aggregate used, porosity, and the proportions
of sand to mortar of the mix. In general, the aggregate contributes negligibly
to the conductivity of the concrete unless it is mill slag. In that case it contributes
strongly to conductivity. Porosity is important because the fluid in the pores is
about 10 times as conductive as the mortar paste. So the more porous (pores
on the order of 20 micrometers diameter) the cement, the higher the conductivity.
The ratio of sand to mortar is also important. The higher the ratio of sand to mortar,
the less conductive the concrete will be.

The conductivity of concrete will fall somewhere between 6 and 65 mS/m, with
the majority of high strength specimens clustering around 35 mS/m. So called
lightweight concrete (what the Ready Mix truck delivers), which contains more
sand, will cluster around about 15-20 mS/m.

Permitivity is more dependent on the exact aggregate used, and its size. Values
can range from as low as 3 to as high as 10 (ignoring mill slag). I don't have a
typical value for this, it varies regionally depending on the type of gravel typically
used in the area.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2953. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <kf2qssssmq1ln2kobb0m1po1494duml77e@4ax.com>
Source record: 179821

On Fri, 22 Sep 2000 09:58:39 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:
>On Fri, 22 Sep 2000 02:44:17 -0400, Gary Coffman <ke4zv@bellsouth.net>
>wrote:
>>If you look carefully at commercial tower installations, you'll note that
>>all of them, except for insulated base AM towers, are grounded through
>>the concrete pier. And if you watch that pier being constructed, you'll note
>>that it is filled with a rebar cage in which all the elements are welded
>>together and welded to the tower base pins or studs to form a Ufer ground.
>>That's because the NEC requires it to be done that way. There may or may
>>not be additional grounding straps to connect to radials or to a ground ring.
>>The NEC doesn't require that. But the Ufer will be there because it is the
>>best practical lightning ground you can create.
>
>In every case I've seen, and I've seen dozens withing the last two
>years, there has always been a large buried ground system. I have no
>idea what in the concrete.

You should watch one being built. It starts with a welded steel cage.

>>The old wives' tales about exploding concrete are just that, old wives'
>>tales.
>
>WSPD lost a concrete pier on a ~300 foot self-support in the 60's
>because of a lightning strike. It shattered the concrete.

Then he didn't have a Code compliant Ufer. Remember, a minimum
of 20 lineal feet of minimum 1/2 inch diameter rebar, all electrically
joined and jacketed in a minimum of 2 inches of concrete is required
to form a Code compliant Ufer. If you just have a J bolt stuck down
in concrete, you don't have a Ufer, and local hotspotting can occur
during a strike.

>>The reason this works is that concrete is a better conductor than
>>average dirt, so it spreads the strike current from the rebar more
>>effectively than can the ordinary dirt around a driven rod.
>
>I'm a little puzzled by that statement. I have a one foot long 5/8th
>inch diameter bolt stuck in the concrete pad of my rotating tower
>here, and I just ohmed it to the large radial system. It averaged
>about 10,000 ohms to the ground system when the leads were reversed.
>
>When I stuck a one foot riece of 1/2 inch conduit in the dirt out
>about ten feet from the tower away from any radials and ohmed it, it
>averaged about 200 ohms on the same meter.

What is the voltage between the tips of the meter probes?
The ASTM standard requires a minimum of 60 volts to avoid
errors due to polarization potentials. Measuring concrete or
soil resistance with a low voltage can give wildly incorrect
results.

>Is there some reference somewhere that shows concrete has less
>resistivity than soil?

Here are three.

1 G.E. Monfore, "The electrical resistivity of concrete," Journal of the PCA 10, 35-48, 1968.

2 H.W. Whittington, J. McCarter, and M.C. Forde, "The conduction of electricity through concrete",
Magazine of Concrete Research 33, 48-60, 1981.

3 I.L.H. Hansson and C.M. Hansson, "Electrical resistivity measurements of portland cement based materials," Cement and Concrete Research 13, 675-683, 1983.

(Yeah, I paid a visit to the Georgia Tech library.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2954. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CD0F2D.B77BFB51@fgi.net>
Source record: 179822

Gary Coffman wrote:

> On Sat, 23 Sep 2000 09:09:50 -0500, Arthur Unwin <aunwin@fgi.net> wrote:
> >Gary Coffman wrote:
> >
> >> snip
> >
> . You
> could consider this like a wire with insulation on it.
> The better the insulation, the less effect it will have
> on the radio wave. You only get increased losses
> when the insulation is poor.

I did not know that!
I had previously been concerned about the impact
of fibre glass poles on the radiating wires within
as used on my antenna
Thanks for responding
Art Unwin KB9MZ

>
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

2955. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CD0EDD.63B68108@bellatlantic.net>
Source record: 179823

Exactly. Because his mind is closed.

'Doc wrote:

> Steve,
> It won't matter what you do, send the file, send the antenna,
> send the computer to run the file, send your mother-in-law! Chip
> will always find a way to 'weasel' on you...
> 'Doc

2956. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Frank Donovan <donovanf@erols.com>
Message-ID: <8qj3ndjet1@bob.news.rcn.net>
Source record: 179824

Chicken wire makes an excellent ground for feeding
and terminating Beverage antennas because of its high
capacitance to ground.

I'm personally familiar with a steerable narrow beamwidth
and low sidelobe military HF receiving system using an
array of 64 phased Beverages, each 220 feet long, 4 feet high a
nd 4 feet apart (side by side). The array occupies an area
about the size of a football field (the field was carefully excavated
to be almost perfectly level)..

The array beamwidth is a few degrees, steerable plus/minus
about 20 degrees from boresight, designed for use in the
mid to upper HF range. Longer Beverages would be needed
for lower frequencies (for example the 80 and 160 meter ham
bands).

The array is installed in an extremely rocky environment
where ground rods do not work. The array uses 40 feet of
chicken wire at both ends of each Beverage, laid directly on the
ground below the sloping ends of each Beverage at the feed
and the termination ends. The excellent performance of the array
was verified by elaborate measurements from an instrumented
helicopter.

73
Frank
W3LPL
donovanf@erols.com

2957. Antenna Tuners: Web-sites? Comparisons?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: cathexis@erols.com
Message-ID: <39cd1602.846885840@news.erols.com>
Source record: 179825

Greetings all,

Headed to a hamfest tomorrow and would like to know if any of
you have any links to web-sites re: antenna tuners. Best would be one
that offers comparisons of different brands, but general info good as well.
The tx. I'll purchase (if lucky) will be a used one most likely. Not looking
for more than about 100W PEP as will tx. into 220ft. horizontal loop of 14
AWG stranded feeding RG58. In the absence of web-sites would be
happy to read your responses to this post. Not totally ignorant of what they
are designed to accomplished, but no idea on comparison shopping.
Hope you can help.

Andrew
KG4JBM

2958. Re: Big antenna/stations vs better operators - was Re: 10M CONTEST

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CD159E.6F7C9C1D@bellatlantic.net>
Source record: 179826

"George, W5YR" wrote:

> Then, how does one in that position deal with losing?

Fract never has to deal with losing - he is incapable of
recognizing when he loses, by a factor of 10 log - or was
that 20 log - whatever. His mind is closed.

> --
> 72/73, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

2959. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <rg5jq8.e7q.ln@mail.specsol.com>
Source record: 179827

Fractenna <fractenna@aol.com> redifines the language again with:

<snip>

>>We'll see how ya do in the 2006 10m 'test.

> Why would I possibly want to do this often? It really is a very selfish thing
> for an adult to run away from other responsibilities many,many weekends in the
> fall and winter.

<rest snipped>

OK, those of you that aren't redwoods or Galapoagos turtles, is 6 YEARS "often"
to you?

Jim Pennino

2960. Re: Sky Loop antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <39cd2060_1@news.cybertours.com>
Source record: 179828

"Dave" <kb9mkp@powercom.net> wrote in message
news:39cbe584.0@windy.powercom.net...
> I would like to build a sky loop antenna. I can come up with about 650
> feet. I would feed it with a about 31 feet of ladder line and a 4 to 1
> balum. I know the length is way longer then 80 meter band. Has anyone had
> experiences with such a long length?
> Thanks, Dave
>
>
Hi Dave ,
I Had one up here for 4 years that was 522 ft. around at about 30 foot avg.
height fed with ladder line worked great.

73 Dave

2961. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <cs5jq8.e7q.ln@mail.specsol.com>
Source record: 179829

Fractenna <fractenna@aol.com> wrote:
>>
>>Fractenna <fractenna@aol.com> wrote:
>>
>><snip>
>>
>>> If it is random then it is a fractal.
>>
>><rest snipped>
>>
>>I would have never guessed when I dumped spaghetti on a plate I was
>>generating
>>fractal images.
>>
>>I guess SUN, HP, et al need to rename the rand function to fract and I'm
>>going to have to go through all those probability and statistics books of
>>mine and change "random" to "fractal".
>>
>>Yep.
>>
>>Jim Pennino
>>

> Hey Jim--

> Let's get real basic.
> Would you say a random walk (drunkard's walk) is NOT fractal?

> Just curious.

> 73
> Chip N1IR

Maybe, especially knowing how you play fast and loose with word definitions.

Would you say non-negative double-precision floating-point values uniformly
distributed over the interval [0.0, 1.0) ARE fractal?

Just curious.

Jim Pennino

2962. Which antenna is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Janice Ogden <ogdenjm@gte.net>
Message-ID: <39CD1F39.69579F2@gte.net>
Source record: 179830
Body handling: Binary attachment payload not displayed: ogdenjm.vcf

Which is the better of the 3 for 11 meter citizens band radio?

1-Shakespeare ABS-1600 Base Antenna
2-Antron99 Omni-Directional Antenna
3-Solorcon I-MAX 2000

[One or more binary attachments are retained only in the source text.]

2963. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CD26E3.EEBC0871@eznec.com>
Source record: 179831

Frank Donovan wrote:
> . . .
> The excellent performance of the array
> was verified by elaborate measurements from an instrumented
> helicopter.

Were the measurements published, or can they otherwise be obtained? Along with a detailed drawing or description of the antenna, this would provide a rare test of how well modeling programs deal with ground. Although good ground conductivity/dielectric constant measurements probably aren't available, they could be varied in the program for the best match, and we could at least see if some reasonable values do provide a match. One good set of measurements is much better than none!

Roy Lewallen, W7EL

2964. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cd24aa.14976735@news.akorn.net>
Source record: 179832

On Sat, 23 Sep 2000 16:11:18 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>>Is there some reference somewhere that shows concrete has less
>>resistivity than soil?
>
>Here are three.
>
>1 G.E. Monfore, "The electrical resistivity of concrete," Journal of the PCA 10, 35-48,
1968.
>
>2 H.W. Whittington, J. McCarter, and M.C. Forde, "The conduction of electricity through
concrete",
> Magazine of Concrete Research 33, 48-60, 1981.
>
>3 I.L.H. Hansson and C.M. Hansson, "Electrical resistivity measurements of portland
cement
> based materials," Cement and Concrete Research 13, 675-683, 1983.
>
>(Yeah, I paid a visit to the Georgia Tech library.)

Since I'm 75 miles from GA Tech, and since you've seen the books,
maybe you can tell us the figures they quote.

That was actually the question.

The Web page Wes mentions clearly states concrete has "fair"
conductivity, and Ufer grounds in the concrete should be augmented by
another ground.

73 Tom

2965. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cd25af.15237752@news.akorn.net>
Source record: 179833

On Sat, 23 Sep 2000 15:49:37 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>The conductivity of concrete will fall somewhere between 6 and 65 mS/m, with
>the majority of high strength specimens clustering around 35 mS/m. So called
>lightweight concrete (what the Ready Mix truck delivers), which contains more
>sand, will cluster around about 15-20 mS/m.
>
>Permitivity is more dependent on the exact aggregate used, and its size. Values
>can range from as low as 3 to as high as 10 (ignoring mill slag). I don't have a
>typical value for this, it varies regionally depending on the type of gravel typically
>used in the area.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

From those numbers it looks like concrete is similar to regular dirt.

73 Tom

2966. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000923175842.10461.00000371@ng-fy1.aol.com>
Source record: 179834

>Fractenna <fractenna@aol.com> redifines the language again with:
>
><snip>
>
>>>We'll see how ya do in the 2006 10m 'test.
>
>
>> Why would I possibly want to do this often? It really is a very selfish
>thing
>> for an adult to run away from other responsibilities many,many weekends in
>the
>> fall and winter.
>
><rest snipped>
>
>OK, those of you that aren't redwoods or Galapoagos turtles, is 6 YEARS
>"often"
>to you?
>
>Jim Pennino
>

Yes. In this context it most certainly is.

73
Chip N1IR

2967. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CD2CF7.20679CD1@mindspring.com>
Source record: 179835

Jim Pennino wrote:

> Fractenna <fractenna@aol.com> redifines the language again with:
>
> <snip>
>
> >>We'll see how ya do in the 2006 10m 'test.
>
> > Why would I possibly want to do this often? It really is a very selfish thing
> > for an adult to run away from other responsibilities many,many weekends in the
> > fall and winter.
>
> <rest snipped>
>
> OK, those of you that aren't redwoods or Galapoagos turtles, is 6 YEARS "often"
> to you?
>
> Jim Pennino

LOL!!!! Thank you. hehehehehe

2968. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CD2830.FF347FD7@dvol.com>
Source record: 179836

Jnrv1978 wrote:

> I am just getting my first HF rig and am trying to decide what to get for an
> antenna. I am on a really tight budget so some things are out. I have been
> looking at the broadband folded dipole by B&W. I like the fact that it won't
> require a tuner. A couple of questions please. What do you think of this
> antenna? Does it tend to be directional? Which way is the best to use it, as
> an inverted V, flat, or sloper? Do you have any other suggestions for
> antennas? I live in west central South Carolina. Thanks for the read! Jon.

The B&W uses a resistor to "broadband" the thing. It wastes power by tossing some of your RF power off as heat. Air colled dummy load. Write it off. Standard coax-fed dipoles for your favorite bands is one tried and proven route. A simple end-fed wire as high and long as you can manage to install tuned with one of the MFJ tuners against an equally simple couterpoise is an all-band solution which works quite well. Don't make the common mistake of limiting yourself to antennas with 50 ohm feedpoints. Assume the need for a tuner at the outset and the possibilities become endless.
>
w3rv

2969. THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: bmullins@henry-net.COM
Message-ID: <000801c025d2$eb3a4bc0$0101a8c0@pavilion>
Source record: 179837
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0005_01C02598.3DD80D80

charset="iso-8859-1"

THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)
Email: bmullins@henry-net.com
Date: 9/222/00
Time: 6:35p.m.

Message:

READING THIS COULD CHANGE YOUR LIFE! I found this=20
on a=20
bulletin board and decided to try it. A little while back, I was =
browsing=20
through newsgroups, just like you are now, and came across an article=20
similar to this that said you could make thousands of dollars within=20
weeks with only an initial investment of $6.00! So I thought, "Yeah=20
right, this must be a scam", but like most of us, I was curious, so I =
kept=20
reading. Anyway, it said that you send $1.00 to each of the 6 names=20
and address stated in the article. You then place your own name and=20
address in the bottom of the list at #6, and post the article in at =
least=20
200 newsgroups. (There are thousands) No catch, that was it. So after=20
thinking it over, and talking to a few people first, I thought about =
trying=20
it. I figured: "what have I got to lose except 6 stamps and $6.00, =
right?"=20
Then I invested the measly $6.00. Well GUESS WHAT!!...within 7=20
days, I started getting money in the mail! I was shocked! I figured it=20
would end soon, but the money just kept coming in. In my first week, I=20
made about $25.00. By the end of the second week I had made a total=20
of over $1,000.00! In the third week I had over $10,000.00 and it's =
still
growing. This is now my fourth week and I have made a total of just=20
over $42,000.00 and it still coming in rapidly. It's certainly worth=20
$6.00, & 6 stamps, I have spent more than that on the lottery!! Let me=20
tell you how=20
this works and most importantly, why it works....Also, make sure you=20
print a copy of this article NOW, so you can get the information off of=20
it as you need it. I promise you that if you follow the directions =
exactly,=20
```

that you will start making more money than you thought possible by=20
doing something so easy! Suggestion: Read this entire message=20
carefully! (print it out or download it.) Follow the simple directions =
and=20
watch the money come in! It's easy. It's legal. And, your investment is=20
only $6.00 (Plus postage) IMPORTANT:=20
This is not a rip-off; it is not indecent; it is not illegal; and it is =
virtually=20
no risk - it really works!!!! If all of the following instructions are=20
adhered to, you will
receive extraordinary dividends. PLEASE NOTE: Please follow these
directions EXACTLY, and $50,000 or more can be yours in 20 to 60=20
days. This program remains successful because of the honesty and=20
integrity of the participants. Please continue its success by carefully=20
adhering to the instructions. You will now become part of the Mail=20
Order business. In this business your product is not solid and tangible, =

it's a service. You=20
are in the business of developing Mailing Lists. Many large=20
corporations are happy to pay big bucks for quality lists. However,=20
the money made from the
mailing lists is secondary to the income which is made from people=20
like you and me asking to be included in that list. Here are the 4 easy=20
steps to success: STEP 1: Get 6 separate pieces of paper and write the=20
following on each piece of paper "PLEASE PUT ME ON YOUR=20
MAILING LIST." Now get 6 US $1.00 bills and place ONE inside=20
EACH of the 6 pieces of paper so the bill will not be seen through the=20
envelope (to prevent thievery). Next, place one paper in each of the 6=20
envelopes and seal them. You should now have 6 sealed envelopes,=20
each with a piece of paper stating the above phrase, your name and=20
address, and a $1.00 bill. What you are doing is creating a service.=20
THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate=20
service and you are paying for it! Like most of us I was a little=20
skeptical and a little worried about the legal aspects of it all. So I=20
checked it out with the U.S. Post Office (1-800-725-2161) and they=20
confirmed that it is indeed legal! Mail the 6 envelopes to the following =

addresses:

#1) Samantha Blizniak, 7937 S. Newcastle, Burbank, IL 60459

#2)Katie Wiess, 14 White Tail Lane, Wallingford, CT 06492

#3)Traci Wood, 4224 Carnwath Rd., Tallahassee, FL 32303

#4)Milissa Crook, 3730 South 255th Place, Kent, WA 98032

#5)James Buckner, 11903 Coit RD. #1803 Dallas, TX 75251

#6)Bobbi Mullins, 31 Sunnydale Lane, Napoleon, OH 43545

STEP 2: Now take the #1 name off the list that you see above, move=20
the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR=20

Name as number 6 on the list. STEP 3: Change anything you need to,=20
but try to keep this article as close to original as possible. Now, post =

your amended article to at least 200 newsgroups. (I think there are=20
close to 24,000 groups) All you need is 200, but remember, the more=20
you post, the more money you make! This is perfectly legal! If you=20
have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal=20
lottery laws. Keep a copy of these steps for yourself and, whenever=20
you need money, you can use it again, and again. PLEASE
REMEMBER that this program remains successful because of the=20
honesty & integrity of the participants & by their carefully adhering to =

the directions. Look at it this way. If you are of integrity, the =
program=20
will continue and the money that so many others have received will=20
come your way. NOTE: You may want to retain every name and=20
address sent to you, either on a computer or hard copy and keep the=20
notes people send you. This VERIFIES that you are truly providing a=20
service. (Also, it might be a good idea to wrap the $1 bill in dark =
paper=20
to reduce the risk of mail theft.) So, as each post is downloaded and =
the=20
directions carefully followed, six members will be reimbursed for their=20
participation as a List Developer with one dollar each. Your name will=20
move up the list geometrically so that when your name reaches the #1=20
position you will be receiving thousands of dollars in CASH!!! What an=20
opportunity for only $6.00 ($1.00 for each of the first six=20
people listed above) Send it now, add your own name to the list and=20
you're in business!=20
---DIRECTIONS -----=20
FOR HOW TO POST TO NEWSGROUPS----------=20
Step 1) You do not need to re-type this entire letter to do your own=20
posting. Simply put your cursor at the beginning of this letter and drag =

your cursor to the bottom of this document, and select 'copy' from the=20
edit menu. This will copy the entire letter into the computer's memory.
Step 2) Open a blank 'notepad' file and place your cursor at the top of=20
the blank page. From the 'edit' menu select 'paste'. This will paste a=20
copy of the letter into notepad so that you can add your name to the
list.=20
Step 3) Save your new notepad file as a .txt file. If you want to do =
your=20
postings in different settings, you'll always have this file to go back =
to.=20
Step 4) Use Netscape or Internet explorer and try searching for various=20
newsgroups (on-line forums, message boards, chat sites, discussions.)
Step 5) Visit these message boards and post this article as a new=20
message by highlighting the text of this letter and selecting paste from =

the edit menu. Fill in the Subject, this will be the header that =
everyone=20

sees as they scroll through the list of postings in a particular group,
click the post message button. You're done with your first one!
Congratulations...THAT'S IT! All you have to do is jump to different=20
newsgroups and post away, after you get the hang of it, it will take=20
about 30 seconds for each newsgroup! **REMEMBER, THE MORE=20
NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL=20
MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's=20
it! You will begin receiving money from around the world within days!=20
You may eventually want to rent a P.O.Box due to the large amount of=20
mail you will receive. If you wish to stay anonymous, you can invent a=20
name to use, as long as the postman will deliver it. **JUST MAKE
SURE ALL THE ADDRESSES ARE=20
CORRECT.** Now the WHY part: Out of 200 postings, say I receive=20
only 5 replies (a very low example). So then I made $5.00 with my
name at #6 on the letter. Now, each of the 5 persons who just sent me=20
$1.00 make the MINIMUM 200 postings, each with my name at #5=20
and only 5 persons respond to each of the original 5, that is another=20
$25.00 for me, now those 25 each make 200 MINIMUM posts with=20
my name at #4 and only 5 replies each, I will bring in an additional=20
$125.00! Now, those 125 persons turn around and post the MINIMUM=20
200 with my name at #3 and only receive 5 replies each, I will make an=20
additional $626.00! OK, now here is the fun part, each of those 625=20
persons post a MINIMUM 200 letters with my name at #2 and they=20
each only receive 5 replies, that just made me $3,125.00!!!=20
Those 3,125 persons will all deliver this message to 200 newsgroups
with my name at #1 and if still 5 persons per 200 newsgroups react I=20
will receive $15,625,00! With an original investment of only $6.00!=20
AMAZING! When your name is no longer on the list, you just take the=20
latest posting in the newsgroups, and send out another $6.00 to names=20
on the list, putting your name at number 6 again. And start posting=20
again. The thing to remember is: do you realize that thousands of=20
people all over the world are joining the internet and reading these
articles everyday?, JUST LIKE YOU are now!! So, can you afford
$6.00 and see if it really works?? I think so... People have said, "what
if the plan is played out and no one sends you the money? So what!
What are the chances of that happening when there are tons of new
honest users and new honest people who are joining the internet and
newsgroups everyday and are willing to give it a try? Estimates are at=20
20,000 to 50,000 new users, every day, with thousands of those
joining the actual internet.Remember, play FAIRLY and HONESTLY
and this will really work

------=_NextPart_000_0005_01C02598.3DD80D80

charset="iso-8859-1"

THIS REALLY WORKS!!!!!!!!!!! (9/6/00 04:40 PM=20
EDT)
Email:=20
bmullins@henry-net.com
Date:=20

9/222/00
Time: =
6:35p.m.

Message:

READING THIS=20
COULD CHANGE YOUR LIFE! I found this
on a=20

bulletin board and decided to try =
it. A=20
little while back, I was browsing
through=20
newsgroups, just like you are now, and came across an article =

similar to this that said you could make thousands =
of dollars=20
within
weeks with only an initial =
investment=20
of $6.00! So I thought, "Yeah
right, this=20
must be a scam", but like most of us, I was curious, so I kept =

reading. Anyway, it said that you send $1.00 to =
each of the 6=20
names
and address stated in the =
article. You=20
then place your own name and
address in the=20
bottom of the list at #6, and post the article in at least =

200 newsgroups. (There are thousands) No catch, =
that was it.=20
So after
thinking it over, and =
talking to a=20
few people first, I thought about trying
it.=20
I figured: "what have I got to lose except 6 stamps and $6.00, right?"=20

Then I invested the measly $6.00. =
Well GUESS=20
WHAT!!...within 7
days, I started =
getting=20
money in the mail! I was shocked! I figured it
would end soon, but the money just kept coming in. In my first =
week, I=20

made about $25.00. By the end of =
the second=20
week I had made a total
of over =
$1,000.00! In=20
the third week I had over $10,000.00 and it's still
growing. This is now my fourth week and I have made a total of =
just=20

over $42,000.00 and it still =
coming in=20
rapidly. It's certainly worth
$6.00, & 6=20
stamps, I have spent more than that on the lottery!! Let me =

tell you how
this works and=20
most importantly, why it works....Also, make sure you
print a copy of this article NOW, so you can get =
the=20
information off of
it as you need =
it. I=20
promise you that if you follow the directions exactly,
that you will start making more money than you =
thought=20
possible by
doing something so =
easy!=20
Suggestion: Read this entire message
carefully! (print it out or download it.) Follow the simple =
directions=20
and
watch the money come in! It's =
easy. It's=20
legal. And, your investment is
only $6.00=20
(Plus postage) IMPORTANT:
This is =
not a=20
rip-off; it is not indecent; it is not illegal; and it is virtually=20

no risk - it really works!!!! If =
all of the=20
following instructions are
adhered to, you=20
will
receive extraordinary =
dividends. PLEASE=20
NOTE: Please follow these
directions EXACTLY,=20
and $50,000 or more can be yours in 20 to 60

days. This program remains successful because of the honesty =
and=20

integrity of the participants. =
Please=20
continue its success by carefully
adhering to=20
the instructions. You will now become part of the Mail
Order business. In this business your product is =
not solid and=20
tangible,
it's a service. You=20

are in the business of developing =
Mailing=20
Lists. Many large
corporations =
are happy to=20
pay big bucks for quality lists. However,
the=20
money made from the
mailing lists =
is secondary=20
to the income which is made from people
like=20
you and me asking to be included in that list. Here are the 4 easy=20

steps to success: STEP 1: Get 6 =
separate=20
pieces of paper and write the
following on=20
each piece of paper "PLEASE PUT ME ON YOUR
MAILING LIST." Now get 6 US $1.00 bills and place ONE inside=20

EACH of the 6 pieces of paper so =
the bill=20
will not be seen through the
envelope (to=20
prevent thievery). Next, place one paper in each of the 6 =

envelopes and seal them. You should now have 6 =
sealed=20
envelopes,
each with a piece of =
paper stating=20
the above phrase, your name and
address, and=20
a $1.00 bill. What you are doing is creating a service.
THIS IS ABSOLUTELY LEGAL! You are requesting a =
legitimate=20

service and you are paying for =
it! Like most=20
of us I was a little
skeptical =
and a little=20
worried about the legal aspects of it all. So I
checked it out with the U.S. Post Office (1-800-725-2161) and =
they=20

confirmed that it is indeed =
legal! Mail the 6=20
envelopes to the following
addresses:

#1) =
Samantha Blizniak,=20
7937 S. Newcastle, Burbank, IL 60459

#2)Katie Wiess, 14 White Tail Lane, Wallingford, CT=20
06492

#3)Traci Wood, 4224 =
Carnwath Rd.,=20
Tallahassee, FL 32303

#4)Milissa Crook, 3730 South 255th =
Place, Kent,=20
WA 98032

#5)James Buckner, =
11903 Coit RD.=20
#1803 Dallas, TX 75251

#6)Bobbi Mullins, 31 Sunnydale Lane, Napoleon, OH =
43545

STEP 2: Now take the #1 name off the list that you =
see above,=20
move
the other names up (6 =
becomes 5, 5=20
becomes 4, etc...) and add YOUR
Name as=20
number 6 on the list. STEP 3: Change anything you need to, =

but try to keep this article as close to original =
as possible.=20
Now, post
your amended article to =
at least=20
200 newsgroups. (I think there are
close to=20
24,000 groups) All you need is 200, but remember, the more =

you post, the more money you make! This is =
perfectly legal! If=20
you
have any doubts, refer to =
Title 18 Sec.=20
1302 & 1341 of the Postal
lottery laws.=20
Keep a copy of these steps for yourself and, whenever
you need money, you can use it again, and again.=20
PLEASE
REMEMBER that this program =
remains=20
successful because of the
honesty =
&=20
integrity of the participants & by their carefully adhering to=20

the directions. Look at it this =
way. If you=20
are of integrity, the program
will continue=20
and the money that so many others have received will
come your way. NOTE: You may want to retain every name and=20

address sent to you, either on a =
computer or=20
hard copy and keep the
notes =
people send you.=20
This VERIFIES that you are truly providing a
service. (Also, it might be a good idea to wrap the $1 bill in =
dark paper=20

to reduce the risk of mail =
theft.) So, as=20
each post is downloaded and the
directions=20
carefully followed, six members will be reimbursed for their =

participation as a List Developer with one dollar =
each. Your=20
name will
move up the list =
geometrically so=20
that when your name reaches the #1
position=20
you will be receiving thousands of dollars in CASH!!! What an =

opportunity for only $6.00 ($1.00 for each of the =
first six=20

people listed above) Send it now, =
add your=20

own name to the list and
you're =
in business!=20

---DIRECTIONS ----- =

FOR HOW TO POST TO NEWSGROUPS---------- =

Step 1) You do not need to re-type this entire =
letter to do=20
your own
posting. Simply put your =
cursor at=20
the beginning of this letter and drag
your=20
cursor to the bottom of this document, and select 'copy' from the=20

edit menu. This will copy the =
entire letter=20
into the computer's memory.
Step =
2) Open a=20
blank 'notepad' file and place your cursor at the top of =

the blank page. From the 'edit' menu select =
'paste'. This will=20
paste a
copy of the letter into =
notepad so=20
that you can add your name to the
list.=20

Step 3) Save your new notepad =
file as a .txt=20
file. If you want to do your
postings in=20
different settings, you'll always have this file to go back to. =

Step 4) Use Netscape or Internet explorer and try =
searching=20
for various
newsgroups (on-line =
forums,=20
message boards, chat sites, discussions.)
Step=20
5) Visit these message boards and post this article as a new =

message by highlighting the text of this letter =
and selecting=20
paste from
the edit menu. Fill in =
the=20
Subject, this will be the header that everyone

sees as they scroll through the list of postings in a =
particular=20
group,
click the post message =
button. You're=20
done with your first one!
Congratulations...THAT'S IT! All you have to do is jump to =
different=20

newsgroups and post away, after =
you get the=20
hang of it, it will take
about 30 =
seconds for=20
each newsgroup! **REMEMBER, THE MORE
NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL =

MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** =
That's=20

it! You will begin receiving =
money from=20
around the world within days!
You =
may=20
eventually want to rent a P.O.Box due to the large amount of =

mail you will receive. If you wish to stay =
anonymous, you can=20
invent a
name to use, as long as =
the postman=20
will deliver it. **JUST MAKE
SURE =
ALL THE=20
ADDRESSES ARE
CORRECT.** Now the =
WHY part:=20
Out of 200 postings, say I receive
only 5=20
replies (a very low example). So then I made $5.00 with =
my
name at #6 on the letter. Now, each of the 5 =
persons who just=20
sent me
$1.00 make the MINIMUM =
200 postings,=20
each with my name at #5
and only =
5 persons=20
respond to each of the original 5, that is another

$25.00 for me, now those 25 each make 200 MINIMUM posts with=20

my name at #4 and only 5 replies =
each, I will=20
bring in an additional
$125.00! =
Now, those=20
125 persons turn around and post the MINIMUM
200 with my name at #3 and only receive 5 replies each, I will =
make an=20

additional $626.00! OK, now here =
is the fun=20
part, each of those 625
persons =
post a=20
MINIMUM 200 letters with my name at #2 and they
each only receive 5 replies, that just made me $3,125.00!!!=20

Those 3,125 persons will all =
deliver this=20
message to 200 newsgroups
with my =
name at #1=20
and if still 5 persons per 200 newsgroups react I
will receive $15,625,00! With an original investment of only =
$6.00!=20

AMAZING! When your name is no =
longer on the=20
list, you just take the
latest =
posting in the=20
newsgroups, and send out another $6.00 to names
on the list, putting your name at number 6 again. And start =
posting=20

again. The thing to remember is: =
do you=20
realize that thousands of
people =
all over the=20
world are joining the internet and reading these
articles everyday?, JUST LIKE YOU are now!! So, can you=20
afford
$6.00 and see if it really =
works?? I=20
think so... People have said, "what
if the=20
plan is played out and no one sends you the money? So =
what!
What are the chances of that happening when there =

```
are tons of=20
new
honest users and new honest =
people who are=20
joining the internet and
newsgroups everyday=20
and are willing to give it a try? Estimates are at
20,000 to 50,000 new users, every day, with thousands of=20
those
joining the actual =
internet.Remember,=20
play FAIRLY and HONESTLY
and this =
will really=20
work

------=_NextPart_000_0005_01C02598.3DD80D80--
```

2970. Re: WOW! A QUAD WITH 5 inch DIAMETER COILS AS A LOOP!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CD4625.31349977@bigfoot.com>
Source record: 179838

Tom W8JI wrote:
> What I do is stick a straw through the CRT and drink your scotch and
> water while you aren't looking.

Dang, that's why my glass is almost always empty.
--
http://www.mindspring.com/~w6rca

2971. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CD5B68.43EADF93@fgi.net>
Source record: 179839

Tom W8JI wrote:

> On Sat, 23 Sep 2000 15:49:37 -0400, Gary Coffman <ke4zv@bellsouth.net>
> wrote:
>
> >Gary
> >Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> >534 Shannon Way | We break it |
> >Lawrenceville, GA | Guaranteed |
>
> From those numbers it looks like concrete is similar to regular dirt.
>
> 73 Tom

Tom,
In this part of the country you could be lynched for using the term
"dirt" in describing the countryside. I can only assume nothing
grows where.you live.
With regard to the use of concrete laced with reinforcement as
a suitable ground connection, swimming pools are the exception here
so are not used to tie a tower legs to ground, concrete seems
to be the next best thing. Certainly better than just a hole in the,
how is it that you say it ....."dirt".
As concrete retains moisture its use has even more going for it
With respect to voltage levels used for testing purposes, there
is many an engineer out there that state, in error, that an electrical
contact is mechanically open when using a Simpson
that uses" low " (battery) voltage levels to test continuity
Regards
Art Unwin KB9MZ

2972. Re: THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CD672E.C4B7F782@oio.net>
Source record: 179840

SPAM... and who the hell wants to be on a mailing list?
You do NOT have permission to add me to your list!
'Doc

2973. Re: Antenna Tuners: Web-sites? Comparisons?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CD6839.44D29B38@oio.net>
Source record: 179841

Set'em up Joe wrote:
>
> Greetings all,
>
> Headed to a hamfest tomorrow and would like to know if any of
> you have any links to web-sites re: antenna tuners. Best would be one
> that offers comparisons of different brands, but general info good as well.
> The tx. I'll purchase (if lucky) will be a used one most likely. Not looking
> for more than about 100W PEP as will tx. into 220ft. horizontal loop of 14
> AWG stranded feeding RG58. In the absence of web-sites would be
> happy to read your responses to this post. Not totally ignorant of what they
> are designed to accomplished, but no idea on comparison shopping.
> Hope you can help.
>
> Andrew
> KG4JBM

Which ever tuner you decide on, get one that has a rated capacity
of at ~least~ twice the power you plan to use.
'Doc

2974. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CD6A01.92444D7E@bigfoot.com>
Source record: 179842

Jnrv1978 wrote:
> One reason I was looking at the B&W was that a friend was going to let me use
> his.

Well, that casts a completely different light on your question.
For free, the B&W is probably not all that bad. It is useful
on some bands. It's just not worth the retail price, IMO.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

2975. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qjqu5skk1@iac5.navix.net>
Source record: 179843

If you would learn English as a first language, you would see that
(somewhat) was a modifier for random, not 2d.

"Fractenna" <fractenna@aol.com> wrote in message
news:20000923103850.19801.00000211@ng-mf1.aol.com...
> >
> >First a quick recap:
> >
> >In a previous post, Chip (N1IR) issued a $1000 challenge for someone to
come
> >up with an antenna design having better performance than the MI2 Fractal
> >Loop.
>
> This is correct. There are particular stipulations--clearly staed,
especially
> as this is to be a bona fide 2D antenna.
>
> > The antenna had to fit within the same physical aperture as the MI2
> >Fractal Loop.
> >
>
> Yes; also contiguous piece of wire.
>
> >In a previous post, I presented a 2D random (arbitrary) wire
configuration
> >within the same physical aperture as the MI2 Fractal Loop that
essentially
> >had the same performance as the MI2.
> Asserted but not shown. You made an offer to send the file out to anyone
> interested and have failed to do so.
>
>
> There was some confusion as to what I
> >meant by random, so I will clarify that now. I simply arranged the wire
in
> >a somewhat arbitrary shape (all straight lines) in one quadrant and then
> >made the entire structure symmetrical in the remaining three quadrants.
Chip
> >claims this configuration must be a fractal but I disagree.
> >
>
> If it is random then it is a fractal.
>
>

> >Chip essentially dismissed this first design. "Remember: the objective
of
> >the FRACTAL CHALLENGE is to come up with something BETTER. Steve, I
founded
> >fractal element design 12 years ago. I've seen it all. It may
> >be new to you, but I've been around the corner a few times. Close isn't
> >better, is it?"
> >
>
> I didn't dismiss it; I just don't see your point. Also, you haven't sent
the
> file you offered.
>
>
> >Rather than just matching the MI2 Loop performance, I thought that it
would
> >be appropriate to better it.
>
> Sure!
>
>
> I have now come up with another arbitrary
> >(somewhat) 2D loop configuration that fits within the same physical
aperture
> >as the MI2 Fractal loop. Performance was determined with EZNEC models of
> >each antenna. Efficiency was determined by including wire loss (Cu
wire).
> >
> >Results:
> >
> > MI2 Random
> >
> >Resonant Frequency: 15.15 MHz 14.94 MHz
> >
> >Resonant Resistance: 28 ohms 32.9 ohms
> >
> >2:1 SWR BW: 1.0% 1.47%
> >
> >Gain: 1.83 dBi 1.94 dBi
> >
> >Lower resonant frequency in same aperture size, lower SWR, more
bandwidth,
> >more gain. Better than the MI2 Fractal Loop.
> >
> >73,
> >Steve, VE9SRB
> >
>
>
> What does it mean to have a (somewhat) 2D loop??

>
> Raed the RULES.
>
> 73
> Chip N1IR
>
>

2976. HS-1500 for home use

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: Cal Kutemeier <ckuter@ix.netcom.com>
Message-ID: <8qjr0v$3e9$1@slb6.atl.mindspring.net>
Source record: 179844

I am thinking about buying a High Sierra 1500 antenna for use at my house.
I will be mounting this as a temporary antenna using a tripod and 1.25" mast
at either 15 or 25 feet.

I would like any comments from anyone who has used this antenna is a
non-vehicle configuration. What kind of radials / counterpoise, if any, is
needed.

Tnx
Cal

2977. Re: HS-1500 for home use

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CD7433.CF50EA4F@bigfoot.com>
Source record: 179845

Cal Kutemeier wrote:
>
> I am thinking about buying a High Sierra 1500 antenna for use at my house.
> I will be mounting this as a temporary antenna using a tripod and 1.25" mast
> at either 15 or 25 feet.

High Sierra actually has a system for fixed use that is more efficient
than a mobile antenna.

> I would like any comments from anyone who has used this antenna is a
> non-vehicle configuration. What kind of radials / counterpoise, if any, is
> needed.

Just like any other vertical. As many radials as long as possible.
--
http://www.mindspring.com/~w6rca

2978. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-23 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <21397-39CD720B-205@storefull-111.iap.bryant.webtv.net>
Source record: 179846

Art Unwin wrote:
"Am I skating on thin ice---?"

Depth of wave penetration depends on wavelength, dielectric constant, and conductivity. The soil behaves as a leaky capacitor. Depth ranges from a few feet at the highest frequencies used for sky-wave communications, to hundreds of feet at AM broadcast and lower frequencies. The quality of reflection produced by the earth is affected by conductivity, dielectric constant, frequency, wave polarization, angle of incidence of the wave and reflecting surface, etc.

A perfect ground reflector will completely cancel the incident wave at its surface if that wave is horizontally polarized and if the incidence angle is small.

At small angles with the surface, the incident and reflected waves at a perfectly reflecting ground surface will add if vertically polarized.

What happens when water on the surface, or saturating the crust, of ground under and in the vicinity of a vertical antenna freezes, depends on the percentage of the wave penetration depth the frost occupies.

It may come as a surprise that sometimes AM broadcast endineers are advised to establish field strength monitoring points for stations in the northern U.S. during winter. The frost often brings higher field strength readings. Thus seasonal changes won`t likely put one of the stations in violation from excessive monitoring point field strength readings. Their actual high readings will have already been cleared in the proof of performance.

Best regards, Richard Harrison, KB5WZI

2979. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CE7A21.568AF2EA@dvol.com>
Source record: 179619

Tom W8JI wrote:

>
> The FCC rarely used the I-net system on amateur bands. It is busy most
> of the time doing important things.
>
> 73 Tom

>
Are you talking about the system they have in a big field in (I think) Gaithersburg? Wouldn't there be some implications involving the feds having difficulty hearing w1s from that locale on 28Mhz? w1s are very scarce here in Philly on 28Mhz, they skip right over us.
>
Brian, w3rv

2980. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CE9D0B.E8DD7BB2@eznec.com>
Source record: 179620

CAM wrote:
>
> Joe, What percentage of the signal is lost due to an SWR of 1.8:1?
> Answer: Neglecting feedline losses, a maximum of 8%, i.e. less than
> one watt or about 1/3 of one dB. . .

If the loss isn't in the transmission line, where is it? My commercial rig has an ALC, and it produces 100 watts out into any load, provided that the mismatch isn't so large as to make it shut down. The rig's efficiency might be a little less (or more) when presented with a 1.8:1 mismatch, but why should I care?

Roy Lewallen, W7EL

2981. Re: Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CE9E2F.2C9916C1@eznec.com>
Source record: 179621

"Jim Bromley, K7JEB" wrote:
> . . .
> I am a firm believer in being able to arrive at specific answers
> from first principles. However, that doesn't necessarily mean
> manipulating complex equations, particularly when the question
> isn't asking for precise answers. A little bit of pencil-and-
> paper geometry goes a long way here.
>
> --
> Jim Bromley, K7JEB k7jeb@arrl.net
> Glendale, Arizona

Come on, now. The equation I posted can be solved on a $4.99 scientific calculator. With a piece of graph paper, you could have a pattern in five minutes.

I do heartily agree, though, that it's extremely important and useful to also have a qualitative and intuitive idea of what's going on.

Roy Lewallen, W7EL

2982. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <0r4mq8.kh4.ln@mail.specsol.com>
Source record: 179622

Fractenna <fractenna@aol.com> wrote:

<snip>

> I don't have any buddies who go hunting or fishing for the weekends.

<rest snipped>

If you were to find some, it just might improve your personality.

Though on second thought, with your personality as it is, it probably wouldn't be wise to try to associate with people that own gutting knives and firearms.

Jim Pennino

2983. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <tq5mq8.kh4.ln@mail.specsol.com>
Source record: 179623

Fractenna <fractenna@aol.com> wrote:
> This weekend, in just a few hours of operation, I acheived record QSO rates
> (for me) with the 10M Fractal Quad Yagi seen on:

> http://www.fractenna.com/ham/hampage1.html

> which details the outstanding performance characteristics and ease of
> construction. The antenna also appeared in (articles by other authors in) La
> Revisita, QTC, and 73 magazines and elsewhere.

> My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived 335
> Q/hr. On average it was 195 Q/hr.

> At least 2 dozen times I received unsolicited comments which stated I was the
> strongest W on the band.

> This is with a JST 245 on 10M phone.

> I am now using a voice keyer, although I find that it is a real turn off to
> most CQ's, because it sounds so...unanimated.

> 73!

> Chip N1IR

Big deal. When we are at solar max, like now, 10M is open to anything.

Last solar max I was doing a LOT of traveling. I bought a HTX-100 (25W for
those that aren't familiar with it), made a dipole out of Radio Shack
speaker wire, soldered a small lug to each end, and thumb tacked it to
the wall of whatever hotel/motel I happened to be in at the time. I also
cut down one of the short Radio Shack CB mag mount antennas so I could
do mobile in rental cars.

I managed to basically "work the world" with this high-tech setup in what
little spare time I had.

I am NOT impressed with working a lot of stations on 10M during a solar max.
The antenna has almost NOTHING to do with it nor is it any indication of how
well, or badly, the antenna works.

Jim Pennino

2984. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <lsatssks3oe5e8a11t0b5b28e6f5k2ouv9@4ax.com>
Source record: 179624

Steve:

Great! Thanks. I'm curious to see if this one will run on the Demo
EZNEC. I'm wishing I could afford to get the full version, but that's
not in the budget right now.

Anyway, I look forward to checking out the layout of this one.

73's

-SSB

On or about Mon, 25 Sep 2000 00:56:38 GMT, "VE9SRB"
<srbest@worldnet.att.net>, using the forum rec.radio.amateur.antenna
did say:

:
:"sideband" <sideband@cac.net> wrote in message
:news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
:.
:>
:> But the advice is still sound. In fact, Steve, if you want, you may
:> email it to me as well. I'll keep copies of the message on three or
:> four of my machines, so if there's ever any question as to the origin
:> or the time of the file, I'll have the proof here. Post it to the NG
:> at the same time, so there's no question.
:>
:> Just my two cents
:>
:> -SSB
:
:SSB:
:
:I would be happy to send you a copy of the file. I want to check it out
:just to verify that there are no problems with it. I'll send it along
:shortly.
:
:73
:Steve, VE9SRB
:
:
:

2985. Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: suestec <crayon@bcpl.net>
Message-ID: <S4yz5.493$cv4.162809@news.abs.net>
Source record: 179625

Greetings to all who read this!

I am considering building a dipole with a pair of
20 meter HF mobile whips and feed it with
450 ohm feed line so I could use the configuration
to 10 meters.

Questions to ponder:
Has any one on this reflector ever constructed a
contraptions as this?
How effective was this antenna?
Would 300 ohm feed line have been a better choice?
Was a balun needed?

Thanks in advance
Greg, K3ANG

2986. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <k7ftssg4b8eghuoda94aifccqtonrbv29v@4ax.com>
Source record: 179626

On or about 25 Sep 2000 02:23:44 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:I don't know and don't care who this person is. It surely isn't me.
:
:Why don't you ask AOL?
:
:NC

I did.. the results were quite interesting...

Damn it's nice having family who works for AOL.

-SSB

2987. Re: OT Comments on idea for indoor FM antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <16954-39CEB715-73@storefull-116.iap.bryant.webtv.net>
Source record: 179627

Christopher Moseley wrote:
"I was thinking of making a two element yagi, using the telescoping elements from television dipoles."

Arnold B. Bailey produced an excellent book: "TV and Other Receiving Antennas" which has a catalog of designs all centered on 200 MHz. For 100 MHz, you need to multiply most of the dimensions by two.

Bailey classifies his horizontal dipole with a parasitic reflector as a horizontally polarized directional antenna. Its pattern has substantial forward gain but modest rear suppression.
Description: Horizontal center-fed half-wave tube in front of parallel half-wave tube.
Size at 200 MHz: Connected element: 25.4 inches long, 0.5-inch diameter.
Parasitic: 29.9 inches long, 0.5-inch diameter.
Spacing: 12 inches between axes.
Transmission line: Matching section required.
Resistance at center frequency: 28 ohms.
Antenna average surge impedance: 300 ohms.
Gain at center frequency: 5 dbd.
Frequency bandwidth: 1 db down, 15%, 3 db down, 33%.

Near identical characteristics are obtained by using a folded dipole as the driven element to quadruple the drivepoint impedance as this may in some cases ease the impedance matching to the feedline.

This dipole with parasitic reflector was described by G.H. Brown in Volume 25, Page 78 of Proc. IRE, Jan. 1937.

Best regards, Richard Harrison, KB5WZI

2988. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CEC0C8.F9F5952B@hiwaay.net>
Source record: 179628

The NG should be aware that this offer is a lie. He offered the EZNEC file for one of his antennas to the group (yep- public offer) under the same set-up- ie, join his private list.

I did just that, and found a post that said to ask Chip, directly. I did. Chip answered, said he would send the file, in "a couple of days".

After four days, I sent him a query-(on his list)- no answer. Knowing he monitored this NG, I asked him the same question, here- ie, did he forget to send it to me?)

HIs response was to ban me from the list- tell me I would NEVER get the file- the reason being that I had posted an offer for him (chip) to provide the file, to THE WHOLE WORLD !!. Another Chipper lie.

He was the one that made the offe, not me- He was apparently looking for an excuse to ban me, but he picked a silly one, with no truth.

However- I am not asking back on his list- nor do I need his file- I have no respect for his censored (heavily, by him)list, or him, and I got a very usable copy elsewhere. All the shotcomings of the antenna, found by others, proved to be true.

I hope this helps.

Bill-W4BSG

Fractenna wrote:
>
> Hi Steve--
>
> I am still awaiting the file you publicly offered on this NG.
>
> I will also remind you (again) that MI2 and other fractal antenna files are
> available to members of the fractal antenna list.
>
> Again, to remind on joining, do:
>
> fractalantenna-subscribe@egroups.com
>
> 73
> Chip N1IR

2989. Need source for aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <8qmf8q$1d9h$1@box6.cho.cstone.net>
Source record: 179629

Does any have some good sources for different size aluminum tubing?

Thanks,

Bill

2990. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CEC19F.815F4A06@bigfoot.com>
Source record: 179630

```
Roy Lewallen wrote:
>
> CAM wrote:
> >
> > Joe, What percentage of the signal is lost due to an SWR of 1.8:1?
> > Answer: Neglecting feedline losses, a maximum of 8%, i.e. less than
> > one watt or about 1/3 of one dB. . .
>
> If the loss isn't in the transmission line, where is it?

Possible mismatch loss in the amp because a Z0-match doesn't
exist and the amp is not seeing its designed-for load.
--
http://www.mindspring.com/~w6rca
```

2991. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CEC38A.E2761397@bigfoot.com>
Source record: 179631

Fractenna wrote:
> That was an AVERAGE rate. My peak was 330Q/hr.

Let's discuss something much more important. How many girls
did you kiss in high school? :-)
--
http://www.mindspring.com/~w6rca

2992. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <5tgmq8.5mh.ln@mail.specsol.com>
Source record: 179632

Fractenna <fractenna@aol.com> wrote:
>>
>>>From: ehsjr@bellatlantic.net
>>
>>>I think this is just one more example of poor communication
>>>from Fractenna, after reading it over several times carefully.
>>
>>I think all of us have written words that can be taken a different way than
>>we
>>intended; Chip clarified it in a followup post; the clarification was pretty
>>clear.
>>
>>73,
>>Ed Hare, W1RFI
>>

> Excuse me;

> I did not clarify. I provided additional information. There is no room for
> ambiguity in the original post. If you read it wrong, don't blame me.

> NC

Damn, looks like someone forgot Rule #1 again.

Rule #1 Chip is always right.
Rule #2 In case of any question, see Rule #1.

Jim Pennino

2993. Re: Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CEC5E9.926AA005@bigfoot.com>
Source record: 179633

suestec wrote:
>
> Greetings to all who read this!
>
> I am considering building a dipole with a pair of
> 20 meter HF mobile whips and feed it with
> 450 ohm feed line so I could use the configuration
> to 10 meters.
>
> How effective was this antenna?

It would be better to use 10m mobile whips. Using 20m Hamsticks (for instance) on 10m may result in self-resonance, a lossy condition where the inductance and distributed capacitance pass energy between them resulting in unacceptable losses. I don't know exactly what the self-resonant frequency of a 20m Hamstick is. Does anyone know?

If you want a 20m-10m antenna, simply put up a 33 ft center-fed dipole fed with ladder-line with a choke at the coax/ladder-line junction. That's what I have and it's rotatable.
--
http://www.mindspring.com/~w6rca

2994. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CEC95C.5249C028@hiwaay.net>
Source record: 179634

Some more of Chips purposful misreading shows up in the latest. I have cut out much of this post, but have NOT changed the following "BIg Lie" paragraph. I have read the original posts that Chip is supposedly refering tohere, and he has either misread them, or is lieing.

Fractenna wrote: In part:
>
>
> Here are the facts:
>
> 1) Best tried to 'better' the MI2 design with a helical one, using 5 inch
> diamter(!!!) tubing. A 3D design (so much for the rules)
> 2) Best claims to have a 'random' design that works as well, yet has not and
> apparently will not, provide the file that he offered publicly on this NG.
> 3) Best claims to have an "(almost)2D" loop which works better than MI2. Again;
> so much for the rules.
> 4) Best claims that the 'small loop performance is SOLEY DO to the length of
> wire used and x and y axis symmetry', a clearly incorrect assessment.
>
> It is time for Mr. Best to act like a scientist and stop diverting the issue.
> If he has something then show us. As I scientist I will respond, in praise, or
>
> Nathan Cohen, Ph.D.

NO1- THe design with the helical windings was not in contention- just an interesting side issue- Chip has also refered to this one as a nine foot loop, which is hilarious.
No2. The design is not purely random, but was made by a random process. THe file has been made available more readily than the ones Chip has.
No3 THis is a BIG LIE- the design in question IS 2d- the word"almost" does NOT modify the symbol "2d" in the original. Any continued reference like this from Chip is a lie, and he knows it.
no4- Only you, Chip, believe otherwise. The analysis says different.

Clean up your act, Chip, and you may gain back some respect- (when hell next freezes over)

It is time for Dr. Cohen to act like a scientist and stop diverting the issue.
He should also give the Doctorate of Steve its respect- he does that for you when he uses any honorific. Calling him "Mr. Best" is just a subtle, calculated insult.

I hope this helps.

Bill-W4BSG

2995. Re: Need source for aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CECAFF.D8FEB112@bigfoot.com>
Source record: 179635

Bill wrote:
> Does any have some good sources for different size aluminum tubing?

Try: http://www.texastowers.com
--
http://www.mindspring.com/~w6rca

2996. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Roland S Geter Sr <roland@geter.org>
Message-ID: <39CEE6F4.BED0A019@geter.org>
Source record: 179636

I used (and still have) an AEA Isoloop that worked real well on a 3 story apartment while on a consulting job in northern CA. It is a very good antenna but requiring care while tuning. AEA added a Isotuner with DOS based software that makes it a lot easier. Disadvantage is maximum of 150 watts and also I think they are now out of business. I recently saw one of these computer versions sold for around $200 here on newsgroup. There are a couple still made by other manufactures.

Roland S Geter Sr - WB6LNA
Scottsdale AZ 85253-4421

John Przychocki wrote:

> I'm looking into verticals that work on an 8 story building? It'll be
> about 120" up and with a contast wind. I live in brooklyn, NY about 2
> blocks from the water (NY Bay).
> I see that the ants. are a big tall, so I'm worried about wind since
> most look like multiple sections. And if the antenna has radials,
> those would have to be at least 10 feet off the roof (Fire code). I
> have an old Shakespeare Big Stick CB antenna that I have been using on
> 10m and the top half on that bends a lot and quite often I see the top
> section doing a 90 degree bend
>
> ANy help would be appreciated.

2997. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39ce3637.53012467@news.azstarnet.com>
Source record: 179669

On Sat, 23 Sep 2000 19:13:02 GMT, n7ws_nospam@arrl.net (Wes Stewart) wrote:

>On Sat, 23 Sep 2000 15:41:47 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:
>
>[snip]
>
>>If concrete is more conductive than dirt, why can I touch two probes
>>from my ohm meter into dirt and see a readable resistance but I can't
>>read the resistnace through a hunk of concrete?
>
>You must keep the same spacing between probes for both measurements and you have
>to stick them into the concrete to the same depth you stuck them into the dirt.
>Do this and report back. :-)
>
>73,
>
>Wes
>
>

I should have added that this is a volume resistivity measurement, so the volumes should be the same. Your concrete sample should have the same volume as the Earth. The only way to achieve this is to reduce the volume of the Earth by one-half and replace it with concrete.

The industrialized nations are working on this.

Cheers,

Wes

2998. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Jim <pinkston@networksplus.net>
Message-ID: <39ce3751$1@news.networksplus.net>
Source record: 179670

Fractenna <fractenna@aol.com> wrote in message
news:20000923145257.17845.00000559@ng-fm1.aol.com...
> >Anyone with half a brain would realize that it is not, even if only by
the
> >continuous "This thread is closed" messages posted by yourself.
> >
> >Now go home and use the bathroom instead of peeing in the sandbox. Leave
the
> >use of the newsgroups to adults.
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >> This thread is closed.
> >>
> >> NC
> >
> >
> This thread is closed.
>
> NC

Just gotta have the last word don't ya.....

2999. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CE1EF5.BFCAD8B2@dvol.com>
Source record: 179671

CAM wrote:

> Will wrote:
> > For what you would spend for the B&W folded-dipole, you can easily pick
> > up a 300W roller-type tuner.
>
> His B&W is free.

>
I still wouldn't waste the effort required to hang the dumb thing. People buy
'em, though . . talk about dumbed-down.
>--

> http://www.mindspring.com/~w6rca

b.

3000. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CE228A.AA0BC19A@dvol.com>
Source record: 179672

ehsjr@bellatlantic.net wrote:

> ....
> analyzer to the antenna with 20 feet of rg 58 and tune it for lowest
> SWR. You need to be able to get to 1.2 to 1 or below. . . .
>
> I believe your 1:8 to 1 SWR is not due to its height - I suspect it is
> due to being near the structure and balcony.. . .

>
Last I heard the feedpoint impedance of a dipole at resonance is 75 ohms which
would create a 1.5 swr into a 50 ohm line from the gitgo and ought to the
lowest possible swr. ??
>
w3rv

3001. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924134227.07667.00000587@ng-fc1.aol.com>
Source record: 179673

```
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20000923145257.17845.00000559@ng-fm1.aol.com...
>> >Anyone with half a brain would realize that it is not, even if only by
>the
>> >continuous "This thread is closed" messages posted by yourself.
>> >
>> >Now go home and use the bathroom instead of peeing in the sandbox. Leave
>the
>> >use of the newsgroups to adults.
>> >
>> >"Fractenna" <fractenna@aol.com> wrote in message
>> >> This thread is closed.
>> >>
>> >> NC
>> >
>> >
>> This thread is closed.
>>
>> NC
>
>Just gotta have the last word don't ya.....
>
>
>
>
>
>
>
>

This thread is closed.

NC
```

3002. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <39CE5C64.7B1B6456@qth.com>
Source record: 179674
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Check out the D2T at my website...YOULL be much happier and 90MPH is no problem... Murray's Radio Ranch: Buy Sell Trade Swap Amateur Radio (Ham Radio) Equipment

John Przychocki wrote:

> I'm looking into verticals that work on an 8 story building? It'll be
> about 120" up and with a contast wind. I live in brooklyn, NY about 2
> blocks from the water (NY Bay).
> I see that the ants. are a big tall, so I'm worried about wind since
> most look like multiple sections. And if the antenna has radials,
> those would have to be at least 10 feet off the roof (Fire code). I
> have an old Shakespeare Big Stick CB antenna that I have been using on
> 10m and the top half on that bends a lot and quite often I see the top
> section doing a 90 degree bend
>
> ANy help would be appreciated.

[One or more binary attachments are retained only in the source text.]

3003. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CE4589.B558F96B@bellatlantic.net>
Source record: 179675

Dan Richardson wrote:

> On 21 Sep 2000 13:46:01 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >Congrats to Sarah for placing second in the CS Science fair (silver medal in
> >Electronics category)! Sara did a study on improving performance on a 'quadgi'
> >by using fractal elements.
> >
> >I corresponded with her dad in the Spring. She's worked very hard and done a
> >great job!
> >
> >Sara got some folks at TRW to volunteer some chamber time to corroborate her
> >range measurements.
> >
> >As a professor, I am very gratified that young people have seen how useful,
> >accessible, and rewarding it is to explore fractal antenna technology. As with
> >Sara, I encourage all hams to experiment with this exciting new technology!
> >
>
> Yes, Sarah was able to compete her project with very little if any of
> your help. I know Sarah and her Dad very well they are members of the
> local radio club of which I'm a member...
>
> When I read you post I checked with her father as to your corsponding
> with him on Sarah's project. Here's his reply to my query
>
> "No Chip didn't really provide Sara with any info, other that the
> minimal stuff available on his web site. He did send an e-mail after
> he heard about her project (before the state science fair), but never
> responded to her reply. He doesn't seem all that interested in
> sharing info with much ofanyone."
>
> Your implying that you *helped* is disgraceful.

Danny,

I think you are assuming Chip had a motive to deceive.
While it is possible that such a motive existed or exists,
there is an awful lot of evidence that something else
is going on.

First, I must state that I, too, thought Chip implied that
he assisted Sara. However, consider this: Fractenna,
including Chip, NC, et al has never shown a good ability to
communicate clearly on the NG. Posts from Fractenna are

so often off the mark that I believe this is just one more case. He/they/it - whomever at Fractenna does not understand what is posted by others, either. Witness the response from NC to you on this. You never made the assertion in your post that NC sees in it.

I think this is just one more example of poor communication from Fractenna, after reading it over several times carefully. I think Chips motive was pure. I believe he was genuinely pleased to find out about the project, and I don't think he was purposely attempting to imply that he helped. There is no doubt that he is enthusiastic about fractal antenna designs - but he is the world's worst "salesman" at getting the folks on this NG excited about it. I needn't rehash what he does that turns people off so much. Suffice it to say that he can't "listen" because his mind is closed.

But I do not believe his post was made with a dishonest motive.

> Danny

3004. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CE4616.EFDB637E@hiwaay.net>
Source record: 179676

Fractenna wrote:
>
> >
> >Fractenna <fractenna@aol.com> wrote in message
> >news:20000923145257.17845.00000559@ng-fm1.aol.com...
> >> >Anyone with half a brain would realize that it is not, even if only by
> >the
> >> >continuous "This thread is closed" messages posted by yourself.
> >> >
> >> >Now go home and use the bathroom instead of peeing in the sandbox. Leave
> >the
> >> >use of the newsgroups to adults.
> >> >
> >> >"Fractenna" <fractenna@aol.com> wrote in message
> >> >> This thread is closed.
> >> >>
> >> >> NC
> >> >
> >> >
> >> This thread is closed.
> >>
> >> NC
> >
> >Just gotta have the last word don't ya.....
> >
> >
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

This thread is

Bill

3005. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CE485F.8BFA602F@hiwaay.net>
Source record: 179677

Sideband- please dont assume that a non-ideal EWR indicates lots of
loss. It just is not true. Several facts are:
1. If the rig is working into the 1.8, and not cutting power back, its
not doing much harm.
1. The 1.8 figure is with respect to an instrument matched to 50 Ohms.
With a normal dipole , a 1:1 is not possibel, without some kind of
transformation.
3. a 1:1 choke balun is probably indicated, to keep the common mode
current down. It will probably help the RFI, also.

Good LUck- Bill-W4BSG

sideband@mindspring.com wrote:
>
> Thanks to everyone that answered so quickly. I am going to try a wire dipole
> and then maybe a loop and see what happens. Part of my concern of the 'high'
> SWR as this is only a 10 watt rig and if much of the signal is lost at such a
> low height...well..... Thanks again for all of the good and (I must add
> polite) speedy answers.
> KB9WFK
> joe
>
> Roy Lewallen wrote:
>
> > sideband@mindspring.com wrote:

3006. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qlh7kbsf2@neptunium.btinternet.com>
Source record: 179678

```
----------------------------------------
Arthur Unwin wrote
> I would assume that the same occurs regarding penetration
of
> the earths upper layers i.e. multiple phase shifts with
varying
> density changes perhaps creating ducting until meeting
with
> a density change (dark side)for the desired phase change
> for return to earth.
============================

Well, it would be like that, were it not for the high
attenuation of radio waves as they pass through the soil or
dirt.

Think in terms of 60 dB per free-space wavelength and you
don't get much further than the RF skin depth in the topmost
layer of soil. At 30 MHz that's only a few feet.
----
Reg
```

3007. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <24805-39CE4656-8@storefull-113.iap.bryant.webtv.net>
Source record: 179679

Tom, W8JI is reputed to have said (It hasn`t appeared on my screen yet):
"Losses in the soil act like a large lossy media with phase shift.
Visulizing the soil as a "leaky capacitor" paints a poor mental image of
what really goes on."

A measurement of electric current which results from electron movements
presents a poor mental image of what really goes on, too. But, current
measurements are useful.

So, we have phase shifts and complex quantities which describe them.
These can be represented by vectors. Vectors con be resolved into their
axial components which can then be composed into a resultant.

The soil involved in radio propagation has been characterized by Terman
as a "leaky capacitor", so that`s good enough for me.

Best regards, Richard Harrison, KB5WZI

3008. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Larry Naumann <n0sa@earthlink.net>
Message-ID: <Easz5.19600$ks.810388@newsread1.prod.itd.earthlink.net>
Source record: 179680

Wouldn't a Moxon rectangle be a lot easier to build? I'm sure it would give
the same performance and be small also, but very much easier to build. Just
a suggestion.
Larry N0SA
"Fractenna" <fractenna@aol.com> wrote in message
news:20000924111259.21759.00000501@ng-cc1.aol.com...
> This weekend, in just a few hours of operation, I acheived record QSO
rates
> (for me) with the 10M Fractal Quad Yagi seen on:
>
> http://www.fractenna.com/ham/hampage1.html
>
> which details the outstanding performance characteristics and ease of
> construction. The antenna also appeared in (articles by other authors in)
La
> Revisita, QTC, and 73 magazines and elsewhere.
>
> My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived
335
> Q/hr. On average it was 195 Q/hr.
>
> At least 2 dozen times I received unsolicited comments which stated I was
the
> strongest W on the band.
>
> This is with a JST 245 on 10M phone.
>
> I am now using a voice keyer, although I find that it is a real turn off
to
> most CQ's, because it sounds so...unanimated.
>
> 73!
>
> Chip N1IR

3009. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924150834.03540.00000170@ng-cr1.aol.com>
Source record: 179681

>d1.prod.itd.earthlink.net>
>
>Wouldn't a Moxon rectangle be a lot easier to build? I'm sure it would give
>the same performance and be small also, but very much easier to build. Just
>a suggestion.
>Larry N0SA
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000924111259.21759.00000501@ng-cc1.aol.com...
>> This weekend, in just a few hours of operation, I acheived record QSO
>rates
>> (for me) with the 10M Fractal Quad Yagi seen on:
>>
>> http://www.fractenna.com/ham/hampage1.html
>>
>> which details the outstanding performance characteristics and ease of
>> construction. The antenna also appeared in (articles by other authors in)
>La
>> Revisita, QTC, and 73 magazines and elsewhere.
>>
>> My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived
>335
>> Q/hr. On average it was 195 Q/hr.
>>
>> At least 2 dozen times I received unsolicited comments which stated I was
>the
>> strongest W on the band.
>>
>> This is with a JST 245 on 10M phone.
>>
>> I am now using a voice keyer, although I find that it is a real turn off
>to
>> most CQ's, because it sounds so...unanimated.
>>
>> 73!
>>
>> Chip N1IR
>

Too big.

73
Chip N1IR

3010. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000924154159.18598.00000730@ng-cu1.aol.com>
Source record: 179682

This thread is hosed!

Rick K1BQT

3011. Re: Killing my kill file

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Pxqz5.1515$mC.93335@monger.newsread.com>
Source record: 179683

Nah, they are getting more and more broad minded and less discriminatory.

They go after Netscape and even some are turning up for LINUX. and Apples.
You can tell when an OS is becoming well used when the viruses start showing
up for them. <:-))

Although, I think (I was wrong one time) Outlook and Outlook Express are
more prone to the embedded text file worms, but Norton is real good at
catching those.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Old Biker" <enfield@3n.net> wrote in message
news:39CB8ECE.20EB5D05@3n.net...
> Gilbert Mouget wrote:....
> > Do you really expect the killfile to behave properly in Outlook
> > Express?
>
> Isn't Outlook Express the one all the viri are attacking?

3012. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924155051.03600.00000219@ng-cr1.aol.com>
Source record: 179684

>
>
>
>ehsjr@bellatlantic.net wrote:
>
>> ....
>> analyzer to the antenna with 20 feet of rg 58 and tune it for lowest
>> SWR. You need to be able to get to 1.2 to 1 or below. . . .
>>
>> I believe your 1:8 to 1 SWR is not due to its height - I suspect it is
>> due to being near the structure and balcony.. . .
>
>>
>Last I heard the feedpoint impedance of a dipole at resonance is 75 ohms
>which
>would create a 1.5 swr into a 50 ohm line from the gitgo and ought to the
>lowest possible swr. ??
>>
>w3rv
>

The impedance will depend on the environemnt--including the height above ground.

It's rare to actually see a HF dipole with a 70 plus ohm resonance. But again--depends on height.

73
Chip N1IR

3013. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CE58FB.B762AEF9@mindspring.com>
Source record: 179685

O.k. I have done some playing and this is what I found. In an attempt to hide the coax there was a small (2 foot section) that ran parallel to the dipole. It was about 2 feet away but when I pulled it down so the coax droped straight down from the feed point the resistance went up to 40 Ohms (it was 30 Ohms) and the SWR dropped to approx. 1.45 :1 at 50.15 MHz which is my center frequency. I got hold of a copy of the ARRL handbook , as was suggested in an email, and was looking at baluns like Bill Aycock had suggested and there was a line in there about them often being used when the feed line was not perfectly perpendicular to the dipole. Well, as soon as I saw that I knew what I had to try first and it helped a bunch. I can live with this. Now I need to get a local ham to try a qso with because I am still not hearing anything and nobody answers my CQ. Maybe this area (Chicago suburbs) is not very active on 6 meters? Maybe the antenna isn't turned the right direction to get anything. I have a brick wall about 4 feet behind it and another brick building across the street. I was kind of hoping for some reflections since my 2 meter dual band antenna in about the same place talks all over except directly behind me. Oh well. I know the location isn't ideal but I won't live here forever. I am still going to experiment with those other antenna ideas and see what happens. Thanks again to all that replied both here and by email. I was pleasantly suprised by the quick turn around time as I was expecting this to go on for about a week.

sideband@mindspring.com wrote:

> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also have
> the use of a MFJ
> 259 analyzer. The dipole is a metal bracket that allows 2 fiberglass
> whips to be
> attached to it, both with ends that allow them to be tuned. I am only
> able to put
> this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> complex and
> currently have it hidden under the wooden balcony of the apartment above
> me. The
> SWR is currently about 1.8 at 50 MHz. If I tune the frequency either up
> or down on
> the analyzer the SWR goes up. Does this mean that the antenna is tuned
> as good as
> is 'possible' and the high SWR is because of the location or will more
> diligent work
> in tuning help? I think this is just because of the low height but I
> defer to those more
> knowledgeable. :-) Also, can you think of anything that will help to
> lower this SWR?

> Grounding something? Standing on my head in a bucket of water? :-) I
> have not
> been able to even hear anything on the radio yet let alone make any
> contacts and
> wonder if this is part of my problem. I know the location and height
> are not ideal
> but it is what I have to work with. I can get lower SWR in the
> apartment but every
> time I key the mic I come blasting through my pc speakers and stereo
> (even though it
> is turned off).
>
> One last thing. If this is the antenna:
> b
> A ----------------------{}----------------------- A
> b
>
> Which directions are forward and back? A or B?
> Does that make sense?
>
> Thanks a lot
> Joe
> KB9WFK

--
The preceding may or may not have been authored by myself but I offer it to
you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned
that I refuse to use a
spell checker and don't take criticism well.

3014. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CE5E4D.5A57@wt.net>
Source record: 179686

Mike Donnelly wrote:
>
> George,
>
> "Need" is a relative term. My Butternut vertical worked just fine without
> radials--enough to achieve DXCC anyway. Granted that the ground is a little on
> the moist side in Northern Illinois. And like I said, the efficiency is
> compromised. And the original question referred to having zero space anyway.
> to me that means no room for any radials.
>
> The use of sixty radials is a throwback to broadcast station practice and
> certainly not necessary in amateur practice. The Butternut radial kit only has
> four of them. What difference do you belive might be heard on the receiving
> end of your transmissions by going from a few radials to 60?
>
> Mike Donnelly
> KG9M
> Ex WD7M, KG9G

I just happened to look into this the other day with the modeling. As
far as I can tell, every time you double the amount of radials, you gain
about .4 db. "over good ground" But this varies a bit. Going from 4
radials to 60 will be appx 2.7 db. Almost equal to doubling your power.
Of course, doubling your power can mean little in some cases, but it can
mean everything in other borderline copy scenarios. Few radials can work
fine in many cases, but a lot of them works better. Are they necessary?
Depends how good a station you want. The broadcasters don't use a lot of
them for nothing. If it didn't make a difference, they wouldn't waste
the money. MK
--
http://web.wt.net/~nm5k

3015. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1dpm@aol.com
Message-ID: <20000924161134.26552.00001367@ng-fi1.aol.com>
Source record: 179687

God bless America

Dick, K1DPM

3016. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CE5C98.939029AE@mindspring.com>
Source record: 179688

Mark Keith wrote:

> Mike Donnelly wrote:
> >
> > George,
> >
> > "Need" is a relative term. My Butternut vertical worked just fine without
> > radials--enough to achieve DXCC anyway. Granted that the ground is a little on
> > the moist side in Northern Illinois. And like I said, the efficiency is
> > compromised. And the original question referred to having zero space anyway.
> > to me that means no room for any radials.
> >
> > The use of sixty radials is a throwback to broadcast station practice and
> > certainly not necessary in amateur practice. The Butternut radial kit only has
> > four of them. What difference do you belive might be heard on the receiving
> > end of your transmissions by going from a few radials to 60?
> >
> > Mike Donnelly
> > KG9M
> > Ex WD7M, KG9G
>
> I just happened to look into this the other day with the modeling. As
> far as I can tell, every time you double the amount of radials, you gain
> about .4 db. "over good ground" But this varies a bit. Going from 4
> radials to 60 will be appx 2.7 db. Almost equal to doubling your power.
> Of course, doubling your power can mean little in some cases, but it can
> mean everything in other borderline copy scenarios. Few radials can work
> fine in many cases, but a lot of them works better. Are they necessary?
> Depends how good a station you want. The broadcasters don't use a lot of
> them for nothing. If it didn't make a difference, they wouldn't waste
> the money. MK
> --
> http://web.wt.net/~nm5k

If I remember correctly , in my communications class at DeVry they said it was a redundancy thing. To be effective they had to have X number and the rules state that number had to be doubled. Now mind you this was a class I took 7 years ago when I had little interest in radio. I would be interested in the actual answer (now that I have an interest) if there is anyone that knows about broadcast installations and FCC regs.

3017. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1dpm@aol.com
Message-ID: <20000924161738.26552.00001369@ng-fi1.aol.com>
Source record: 179689

Chip..

I spent a lot of time with Rick on the net this AM so can vouch for him depending on the exact time your were QRM'ed. I have known Rick for 42 years and think I have a pretty good feel for his amateur operating practices. No way Chip. It was NOT K1BQT. Is there anyone else you can think of who may have wanted to do this to you?

73 OM
Dick, K1DPM

3018. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924161720.13548.00000527@ng-cf1.aol.com>
Source record: 179690

>
>God bless America
>
>Dick, K1DPM
>
>
>
>
>
>

This thread is closed.

NC

3019. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000924161956.18598.00000741@ng-cu1.aol.com>
Source record: 179691

>BTW Rick, any idea who the idiots were who QRM'ed me this morning? I am not assuming it was you.<

You are correct (I'm not THAT stupid). In fact, whatever happened, I must have missed it. I tuned across you and stopped to listen for a few minutes before moving up the band, and your frequency was pretty clear of QRM.

I did swing the beam south and listen to your audio again to see if I could discern any EQ difference between the voice keyer and the mic. This time, I opened up my passband and could hear a slight change. When I reset the filtering to where I normally keep it, I didn't hear it anymore. It's there, but pretty minor--I doubt anyone would notice unless they were listening for it.

Rick K1BQT

3020. Re: THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CE6189.22FE@wt.net>
Source record: 179692

sideband wrote:
>
> This has nothing to do with fractal antennas....
>
> ...or does it?
>
> ::Cackle::
>
> -SSB

This thread is closed. MK
--
http://web.wt.net/~nm5k

3021. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924162129.13535.00000557@ng-cf1.aol.com>
Source record: 179693

>
>Chip..
>
>I spent a lot of time with Rick on the net this AM so can vouch for him
>depending on the exact time your were QRM'ed. I have known Rick for 42 years
>and think I have a pretty good feel for his amateur operating practices. No
>way
>Chip. It was NOT K1BQT. Is there anyone else you can think of who may have
>wanted to do this to you?
>
>73 OM
>Dick, K1DPM
>
>

Hello Dick--

No; Ii didn't even suggest he was QRMing me this morning; i was wondering if he might know who was. That's what I ask. Please read my post again.

It was a pretty sincere question, as Rick seems to monitor quite a few of my 10M activities.

73
Chip N1IR

3022. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924162451.13535.00000558@ng-cf1.aol.com>
Source record: 179694

>I did swing the beam south and listen to your audio again to see if I could
>discern any EQ difference between the voice keyer and the mic. This time, I
>opened up my passband and could hear a slight change. When I reset the
>filtering to where I normally keep it, I didn't hear it anymore. It's there,
>but pretty minor--I doubt anyone would notice unless they were listening for
>it.
>
>Rick K1BQT
>

Thanks on audio;

Just so you know, the idiocy was so far from your operating behavior that it never occurred to me that it was you.

The FCC has a real time location system using interferometry. I think if more hams knew this there would be less malicious interference.

73
Chip N1IR

3023. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CE62E4.F8DCDFC@bigfoot.com>
Source record: 179695

sideband@mindspring.com wrote:
>
> Thanks to everyone that answered so quickly. I am going to try a wire dipole
> and then maybe a loop and see what happens. Part of my concern of the 'high'
> SWR as this is only a 10 watt rig and if much of the signal is lost at such a
> low height...well..... Thanks again for all of the good and (I must add
> polite) speedy answers. KB9WFK joe

Joe, What percentage of the signal is lost due to an SWR of 1.8:1?
Answer: Neglecting feedline losses, a maximum of 8%, i.e. less than
one watt or about 1/3 of one dB.

Moral: An SWR of 1.8:1 is acceptable for almost all applications.
You will still be radiating approximately 9 watts. I would go
ahead and use it as is.
--
http://www.mindspring.com/~w6rca

3024. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <AHtz5.4566$6T.388481@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179696

Janice,

You want rec.radio.cb...

It's down the hall on the left. You can't miss it, just
listen for all the hollering and shouting...

Tell 'em the hams set 'ya since we dunno nuffin
'bout no CB antennas.

That oughtta get 'em started.

seven trees
Gary

Janice Ogden <ogdenjm@gte.net> wrote...
> Anyone wish to share their opinions on the best of the 3
antenna's that...
>
> 1-Shakespeare ABS-1600 Base Antenna
> 2-Antron99 Omni-Directional Antenna
> 3-Solorcon I-MAX 2000
>
>

3025. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000924165802.18598.00000743@ng-cu1.aol.com>
Source record: 179697

>Wouldn't a Moxon rectangle be a lot easier to build? I'm sure it would give the same performance and be small also, but very much easier to build.<

Having built one for 10-M, I think Moxon Rectangels are pretty easy. I used smaller diameter tubing than LB Cebik prescribed his and telescoped each end section just before the 90-degree bend so I could tune it and also align the tips more easily. Used a chapo tubing bender to form the 90's instead of the pre-bent widgets LB used. Took me an afternoon to build and tune, weighed about 2 pounds, worked great.

At VHF, Moxons make great handheld DF antennas because they are compact and have a deep backnull. Good for vertical sidemount, too.

In fairness, I don't know what kind of effort a 10-M FQY would take--my fractal construction experience has all been at VHF.

Rick K1BQT

3026. Re: Glass Mount Installation Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <39CE66A7.7DA7@rpi.edu>
Source record: 179698

G. M. Privette wrote:
>
> I purchased a Valor/Pro-Am 2m/70cm Glass Mount Antenna (new). No
> installation instructions included. My questions are:
>
> 1. How to orient the inside base? Can it be mounted in any orientation,
> i.e. the coax connector pointing down, left or right?
>
> 2. How to orient the ground plane wire that is connected to the coax
> connector? Can it point away from or toward the inside unit?
>
> I read the installation instructions for the MFJ version of this antenna and
> they say to orient the inside base with the coax connector pointing down.
> The instruction for mounting the ground plane wire is confusing.
>
> Any help and experiences with this antenna are appreciated.
>
> Thanks,
>
> Jerry, W4JX
> email: w4jx@arrl.net

Jerry,

In general, the orientation of the inside part of the glass-mount is
irrelevant, but should be at least and inch from the edge of the
window. The 70cm "radial" should be oriented parallel to the horizon
for best gain. Note: the antenna will work fine without this, but the
gain on 70cm will be reduced considerably. Most of these thru-glass
antennas have about 0.5 db loss in the coupling, and have around 2.2 dB
gain (dbi) on 2m and around 4.5 dB gain on 70cm when the "radial" is
installed.

Curt Breneman
RPI Chemistry
KC2EBP

3027. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CE6EDF.F657482D@att.net>
Source record: 179699

Well, those "broadcast days" engineering plus later work by Jerry Sevick prompted me to go to 60 radials in order to gain about 2-3 db less ground loss. Here in North Central Texas, especially in the summers, we have very dry and hard topsoil and attendent high ground loss. A ground rod just doesn't do it around here.

When you are running a max of 100 watts, as I am, that can be important. Since much of my operating is QRP, it really becomes important. It ultimately becomes a question of what performance you are seeking and your willingness to do what it takes to achieve that level.

Keep in mind that the Butternut radial kit of 4 radials is designed and recommended on the basis that the radials will be part of an overall *elevated* installation of the antenna and the radials. This does not translate into 4 radials being "enough" in a ground environment.

Others on the NG have commented on this matter.

Glad your antenna worked so well. By the way, my radial farm occupies zero space above ground . . .

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Mike Donnelly wrote:
>
> George,
>
> "Need" is a relative term. My Butternut vertical worked just fine without
> radials--enough to achieve DXCC anyway. Granted that the ground is a little on
> the moist side in Northern Illinois. And like I said, the efficiency is
> compromised. And the original question referred to having zero space anyway.
> to me that means no room for any radials.
>
> The use of sixty radials is a throwback to broadcast station practice and
> certainly not necessary in amateur practice. The Butternut radial kit only has
> four of them. What difference do you belive might be heard on the receiving
> end of your transmissions by going from a few radials to 60?
>
> Mike Donnelly
> KG9M
> Ex WD7M, KG9G

3028. Southern Ontario Scanning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: jeff_scannerdude@yahoo.com
Message-ID: <8qlrs2hfs1@nnrp1.deja.com>
Source record: 179700

Southern Ontario Scanning
Scanning the air waves from 25 MHz to 1.00 GHz List
For Sharing of Scanner Information and Scanning Radio
Frequencies in the Southern Ontario The People in this
list are nice and I moderate that so it stays that way
This is a specialized list dedicated to the
Trunktracking Radio Scanning and Conventional Scanning
Any thing to do will Scanning or Trunktracking in the
Southern Ontario In the Region
Toronto,Peel,York,Halton,Durham,Simcoe,Dufferin,Osprey,Helancthon,Nari
pose,Manvers,Wellington,Hamilton
Wentworth, Niagara and any place in the World if you
what to talk about the subject of Scanning or Southern
Ontario and the list has information on the BC235XLT
BC895XLT BC245XLT BC780XLT !! And more!!

To join the list go to this site UR:
http://www.egroups.com/group/southscan

Happy scanning :)
Bob and Jeff

Note to go to the site URL to this page:
http://www.egroups.com/group/southscan

Sent via Deja.com http://www.deja.com/
Before you buy.

3029. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce6e4c.724288@news.akorn.net>
Source record: 179701

On 24 Sep 2000 15:33:39 GMT, fractenna@aol.com (Fractenna) wrote:

>July 5, 1999. F1 Tornado.
>It was witnessed, here, by 4 people. Damage included snapping a 14 inch oak
>tree and a 12 inch maple like tooth picks, at the 10-15 foot level.

What distance were these trees from your house?

>It skimmed the area over a 3 mile swatch over Lexington, Arlmont, and Belmont.
>I described this back on the NG some time back.
>Best Regards,
>Chip N1IR

That means nothing. F1 tornados are typically very small in width.

How far from your house was the tornado?
Did it pass through your property? What was the damage to your roof
shingles and house?

73 Tom

3030. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000924172527.18598.00000747@ng-cu1.aol.com>
Source record: 179702

>The FCC has a real time location system using interferometry. I think if more hams knew this there would be less malicious interference.<

That system was pretty well outlined in QST a while back--and the FCC is currently actively using it on 10 to nail freebanders. I used to run nets and put up with that crap, so I don't have much respect for it.

Anybody remember the story floating around awhile back about a drunken swapnet QRMer forced at gunpoint by the hams who caught him to smash his equipment with a sledge hammer? Probably an urban myth, but it always gave me a warm feeling. Now Mr. Hollingsworth gives me a warm feeling.

Rick K1BQT

3031. Re: Bobtail Curtain Plans- Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce7040.1224188@news.akorn.net>
Source record: 179703

On Sun, 24 Sep 2000 16:29:26 GMT, Marc
<msdel4@postoffice.worldnet.att.net> wrote:

>Does anyone have a good set of construction plans for the Bobtail
>Curtain with formulas? I want to build one for 17m. Have heard they
>are great and easy to build antennas. Feedline top, center vertical, or
>corner???
>Thanks and 73,
>Marc

Hi Marc,

A Bobtail is pretty lossy unless you get it well up above earth (in terms of the wavelength). Maybe 1/4 wl above ground at the element tips.

Other than that a ground screen helps.

Feeding it with coax at the tope of the vertical center section is a pain, because the feedline will almost always couple to the antenna. The only way around that is a high impedance choke balun at a couple points on the feedline, or pulling the feedline out away from the antenna at or above the height of the top for a good distance before dropping it down.

I prefer bottom feeding the center element through a matching network, working it against a fairly decent radial system. I think you would do better on 15 meters with a high dipole or perhaps an EDZ antenna. I've never found Bobtails to work as well as some claim.

73 Tom

3032. antenna list

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: jeffscannerdudemater@my-deja.com
Message-ID: <8qlsed$i4q$1@nnrp1.deja.com>
Source record: 179704

Note there a antenna list for scanner dudes that what to
1 have good reception
2 pick up the hared to hear stations
3 antenna theory
4 antenna design
5 scanner antennas
6 reception problems and talk on hare to fix it
7 what is a good antenna to by

To join
1 go to this http://www.egroups.com/group/scanner-antenna
2 click on the subscribe on the lef site
3 pick the option you what
4 that you all done

if any one has a problems sent it to scanner-antenna-owner@egroups.com

thanks for your time

Sent via Deja.com http://www.deja.com/
Before you buy.

3033. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce73a3.2090908@news.akorn.net>
Source record: 179705

On 24 Sep 2000 15:12:59 GMT, fractenna@aol.com (Fractenna) Trolled:

>This weekend, in just a few hours of operation, I acheived record QSO rates
>(for me) with the 10M Fractal Quad Yagi seen on:
> http://www.fractenna.com/ham/hampage1.html
>which details the outstanding performance characteristics and ease of
>construction. The antenna also appeared in (articles by other authors in) La
>Revisita, QTC, and 73 magazines and elsewhere.
>My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived 335
>Q/hr. On average it was 195 Q/hr.
>At least 2 dozen times I received unsolicited comments which stated I was the
>strongest W on the band.
>This is with a JST 245 on 10M phone.
>I am now using a voice keyer, although I find that it is a real turn off to
>most CQ's, because it sounds so...unanimated.
>73!
>Chip N1IR

Nice Troll! Congrats!

3034. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924174312.00143.00000724@ng-fm1.aol.com>
Source record: 179706

>That means nothing. F1 tornados are typically very small in width.
>
>How far from your house was the tornado?
>Did it pass through your property? What was the damage to your roof
>shingles and house?
>
>73 Tom
>

Eyewitnesses said it was a blurry rotation of wind--no dust or cloud-- about 40 feet wide. The trees were about 20 and 40 feet from the house.

The house sustained some damage but it skimmed it mostly

I was looking out the widnow and saw all the tres and bushes go sideways for a few seconds. It was weird.

NC

3035. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000924182432.26831.00000665@ng-bg1.aol.com>
Source record: 179707

Where is the list or info from attendees of famous closed open house? So far no one came forward from claimed 24 participants in the "open house".
This thread is open untill we see any comments. Judging by other lying skunk posts, there was nobody and he was multiplied by 24x.

bada BUm

3036. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce7ce1.4457218@news.akorn.net>
Source record: 179708

Someone e-mailed me this, but he wants to remain unnamed to the
general public:

I didn't want to get into a clusterfight on the NG with this one, and
thot
you might get a chuckle. You can quote me without attribution <BG>.

After the Ufer experience on the NG, of last year, several of us
interested
in high-energy discharges wanted to find out whether vaporizing metal
inside
concrete could rupture the surrounding jacket.

Back in June, we experimented to find out how many joules it took to
vaporize a 2ft length of #10 copper on discharge. My ears are still
ringing <G>. Nice plasma!

We made a number of I-shaped concrete (5-bag, crusher-run) pieces,
about
a
foot long and an inch and a half square, with pieces of #10 copper
wire
in
their centers. Cured 'em properly.

The results give a whole new meaning to 'fragging'. The largest
chunk
of
concrete we could find was maybe a half inch across. The devastation
was
complete. Ain't no pictures cuz the chunk above took out the camera
:-(

Sure beats the tantalum-capacitor substitutes I've been using for M80s
and
blasting caps on halloween and other occasions. The noise
approximates
a
20-pound cannon shot -- I couldn't tell the difference.

I can see why someone might be nervous about depending totally on a
Ufer
ground for lightning protection. It didn't take all that many joules
to
frag the concrete.

End....

Still looking for tests or data.

73 Tom

3037. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce816d.5621503@news.akorn.net>
Source record: 179709

On 24 Sep 2000 21:43:12 GMT, fractenna@aol.com (Fractenna) wrote:

>Eyewitnesses said it was a blurry rotation of wind--no dust or cloud-- about 40
>feet wide. The trees were about 20 and 40 feet from the house.
>
>The house sustained some damage but it skimmed it mostly
>
>I was looking out the widnow and saw all the tres and bushes go sideways for a
>few seconds. It was weird.
>
>NC

Sounds like a real nasty tornado! I'm amazed anything survived!!!!

Anyway, despite the wide swath of destruction, at least it makes great
advertising hype.

My antennas have withstood a few F1 tornados like that also! They
occur a few times a year here. Some have blown down one foot diameter
trees!

73 Tom

3038. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce82c6.5966473@news.akorn.net>
Source record: 179710

On 24 Sep 2000 21:25:27 GMT, k1bqt@aol.com (K1BQT) wrote:

>>The FCC has a real time location system using interferometry. I think if more
>hams knew this there would be less malicious interference.<
>
>That system was pretty well outlined in QST a while back--and the FCC is
>currently actively using it on 10 to nail freebanders. I used to run nets and
>put up with that crap, so I don't have much respect for it.
>
>Anybody remember the story floating around awhile back about a drunken swapnet
>QRMer forced at gunpoint by the hams who caught him to smash his equipment with
>a sledge hammer? Probably an urban myth, but it always gave me a warm feeling.
> Now Mr. Hollingsworth gives me a warm feeling.
>
>Rick K1BQT

If the intruders are all still walking around free men, I suspect it
is an urban myth.

The FCC rarely used the I-net system on amateur bands. It is busy most
of the time doing important things. It takes me about a week or so to
get them to look at problems like continuous jammers on things like
WWV, I imagine they care less about one ham being bothered by QRM for
a few minutes. It took four weeks to schedule it for a BC IMD problem
in Chattanooga, and I have the direct number to I-net.

Especially when that ham has a history of exaggerating the truth and
says he has filed what amount to false police reports.

73 Tom

3039. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CE71E7.4D479E61@dvol.com>
Source record: 179711

K1BQT wrote:

> >This is with a JST 245 on 10M phone.<
>
> JRC-245

>
Japan Radio Co. makes the JST-254 xcvr.
>

>
>
> Rick K1BQT

>
w3rv

3040. Re: Need help on exam questions in E9C

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <8qm0m3btr1@nnrp1.phx.gblx.net>
Source record: 179712

> Jason Hsu, KB9PNZ posted:

> The first 6 questions in this section of the question pool ask for
> antenna radiation patterns for two-1/4 wavelength vertical antennas at
> different distances and fed at different phases. Does anyone have the
> formula? I can see what the answers are, but I want to know how I can
> derive them.

You have gotten good answers to this question from Jim, Roy and Richard. I think they keyed off of your word "derive", which usually implies a rather rigorous mathematical treatment. May I suggest a few rules of thumb (heuristics) that I have found useful in approaching these problems:

Looking at the antennas from the top (they would be two dots on a piece of paper), draw a line between them and then another line perpendicular to and bisecting that first line.

Consider measuring points anywhere along that perpendicular line.

If the antennas are fed IN-PHASE (at 0 degrees phase shift), the signals from the two antennas will be precisely in-phase with each other and add constructively along that line. At any other points, the phasing will be off, the addition will be less than perfect and the resulting signal will be less than maximum.

Therefore, for in-phase antennas, the maximum radiation will always occur in the direction perpendicular to the line connecting them. This is true whether the antennas are 1/4 or 1/2 wavelength apart.

Next consider the case where the antennas are fed OUT-OF-PHASE (at 180 degrees phase shift) and separated from each other by 1/2 wavelength. Along that same perpendicular line the signals from the two antennas will be precisely 180 degrees out of phase and will completely cancel each other, producing a null in the combined response in that direction.

On the other hand, at each antenna, the signal from the other antenna will have been shifted an additional 180 degrees by traveling the 1/2 wavelength between them and will now be in-phase with the signal from that antenna. The signals reinforce each other and produce maximum responses in both directions of the line joining them.

Although the above considered 1/2-wavelength-spaced antennas, the same holds true for closer spacings and 180-degree phase

shifts in feeds.

The case of antennas separated by 1/4 wavelength and fed 90 degrees out of phase is somewhat special. It produces a unidirectional response in the direction of the line between the two antennas. In one direction of that line is a null produced by the two signals cancelling one another. In the other direction is the maximum response due to both signals adding in-phase.

The exam question doesn't go into which direction is which, but the way to tell is to compare the phase of the signal of the first antenna to that of the signal in the second one after the first one has been delayed by an additional 90 degrees due to traveling the 1/4-wavelength distance. If they cancel each other, that direction (first-to-second) is the null. If they add, the first-to-second direction is that of maximum response.

I am a firm believer in being able to arrive at specific answers from first principles. However, that doesn't necessarily mean manipulating complex equations, particularly when the question isn't asking for precise answers. A little bit of pencil-and-paper geometry goes a long way here.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

3041. Antenna Stacking advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bruce Brackin <bbrackin@bellsouth.net>
Message-ID: <39CE8E89.2E01F1B2@bellsouth.net>
Source record: 179713

Greetings - Have a 6 meter beam, 2 meter beam and triband vertical (6/2/70cm) I would like to get on common rotor mast. Looking for advice on seperation/spacing of these antennas. The 6M beam is 15' boom - 6 element LP, hort. polarized. 2 meter is 12' boom -10 element yagi vertically polarized. Triband vertical has 3 radials - one long (counterpoise) for tuning 6 meter. Total wind load of all is about 4 sq feet.

Have always heard and read the 1/2 boom length rule. Any difference on positioning vert polarized (2 m) over a horizontal one (6 m). Figure the vertical triband can be relatively close to 2m beam because of short radials/counterpoise. Don't want to use a mast any longer than I need to.

Thanks - Bruce, KD5IUG

3042. Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Phillip Sikes <psikes@whidbey.net>
Message-ID: <904tsscuchqabjd1stj7lrquru0jt9iuni@4ax.com>
Source record: 179714

Hello to the group. I have been looking at the Radio Works Super Loop 80 and was wondering if anyone has had any experience with the antenna. My main interest is using it for 80M DXing so don't care too much about the other bands and how they react.

73 - Phil
N7UX

3043. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924194323.10289.00000632@ng-ci1.aol.com>
Source record: 179715

>
>
>
>K1BQT wrote:
>
>> >This is with a JST 245 on 10M phone.<
>>
>> JRC-245
>
>>
>Japan Radio Co. makes the JST-254 xcvr.
>>
>
>>
>>
>> Rick K1BQT
>
>>
>w3rv

I don'y know what they make now ; I know what I have.

It's a JST-245.

73
Chip N1IR

3044. Re: Hi all

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CE77AA.A021E33A@dvol.com>
Source record: 179716

Mark Flanagan wrote:

> I recently got a used beam that's in great condition except for all the U
> bolts. What is a good source for stainless steel U bolts of various sizes?
> (either mail, internet or local type of store)
>
> Mark, K1MKF
>
> Please reply directly to markf@cshore.com

>
Try the biggest hardware store in the U.S. :
>
www.mcmaster.com/
>
w3rv

3045. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <9h4tsssu0cr7jurbdp4m97s10742fea5q6@4ax.com>
Source record: 179717

Wow... Fast conversations. 130 QSO's an hour? That's one every 30
seconds. INFREAKINGCREDIBLE...

Not that I believe it... 10M phone... voice contacts... 335 QSO's an
hour on voice?

What's the point in having a QSO if you don't actually TALK to the
person? Doesn't seem to make much sense...

or were you counting the people who answered your CQ whom you didn't
answer? That doesn't count as a QSO in my book.

Reach down between your legs, grab ahold of your sholders, pull really
hard and get your head out of your ass.

-SSB

On or about 24 Sep 2000 15:12:59 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:

:This weekend, in just a few hours of operation, I acheived record QSO rates
:(for me) with the 10M Fractal Quad Yagi seen on:
:
: http://www.fractenna.com/ham/hampage1.html
:
:which details the outstanding performance characteristics and ease of
:construction. The antenna also appeared in (articles by other authors in) La
:Revisita, QTC, and 73 magazines and elsewhere.
:
:My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived 335
:Q/hr. On average it was 195 Q/hr.
:
:At least 2 dozen times I received unsolicited comments which stated I was the
:strongest W on the band.
:
:This is with a JST 245 on 10M phone.
:
:I am now using a voice keyer, although I find that it is a real turn off to
:most CQ's, because it sounds so...unanimated.
:
:73!
:
:Chip N1IR

3046. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <Xvwz5.210554$c5.4462052@news2.rdc1.on.home.com>
Source record: 179718

Gary McAdams <g.m.mcadams@worldnet.att.net> wrote in message
news:AHtz5.4566$6T.388481@bgtnsc05-news.ops.worldnet.att.net...
> Janice,
>
> You want rec.radio.cb...
>
> It's down the hall on the left. You can't miss it, just
> listen for all the hollering and shouting...
>
> Tell 'em the hams set 'ya since we dunno nuffin
> 'bout no CB antennas.
>
> That oughtta get 'em started.
>
> seven trees
> Gary
>
Gary you are an idiot. There is more childish fighting and back stabbing in this newsgroup than most. If you do not have an answer for this person then just pass on by.

Barry D.

3047. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39CDCA0B.991377E1@earthlink.net>
Source record: 179769

Hey John,

You might not remember me, but I am Alistair White's older brother Will. I am living in Arizona, but am quite familiar with the problem you have there. I used to have several wire antennas on top of our house on Pierrepont St., and never tried a vertical for the reasons you state. Any commercial vertical ought to work fine, in terms of communications performance.

You ought to look at the advertised wind load/wind survival figures, but many many hams run verticals on top of tall buildings or other structures like towers, and they survive the wind quite well. You probably want to mount the antenna on a >10' 2" thick galvanized mast, with the mast mounted either to a tripod or via straps and clamps to a chimney or other rooftop projection.

Guying will obviously be neccesary to effect a strong, durable installation. Be sure to check charts such as published in the ARRL Antenna Book for certain resonant lengths of guy line to avoid. Radials, or one of the counterpoise "kits" the various antenna manufacturers sell, are absolutely necessary if you want even moderate performance from a vertical monopole. They aren't such a pain in the ass as many people seem to think they are. As for particular models, I used to have a Butternut, and that worked great for me, if a bit narrow-banded on 75M.

I have known several hams who have had good results with either a Butternut, or a Cushcraft R-7000. The height of your building is a definite plus, and if I had that advantage, I would consider a wire inverted-V fed with ladderline or twinlead via a decent tuner, perhaps mounted on top of a push up mast. It is significantly cheaper an antenna, has better wind survival, is no harder to install than a vertical with radials, is nearly as omnidirectional as the vertical, and has the advantages of being more efficient, offers wider bandwidth, and is slightly less prone to noise pickup, especially in an RF-noisy urban environment like yours. Hope this helps.

73 de Will White KD7BFX

John Przychocki wrote:
>
> I'm looking into verticals that work on an 8 story building? It'll be
> about 120" up and with a contast wind. I live in brooklyn, NY about 2
> blocks from the water (NY Bay).
> I see that the ants. are a big tall, so I'm worried about wind since
> most look like multiple sections. And if the antenna has radials,

> those would have to be at least 10 feet off the roof (Fire code). I
> have an old Shakespeare Big Stick CB antenna that I have been using on
> 10m and the top half on that bends a lot and quite often I see the top
> section doing a 90 degree bend
>
> ANy help would be appreciated.

3048. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CDCD42.E6B0FA0@eznec.com>
Source record: 179770

sideband@mindspring.com wrote:
>
> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also have
> the use of a MFJ
> 259 analyzer. The dipole is a metal bracket that allows 2 fiberglass
> whips to be
> attached to it, both with ends that allow them to be tuned. I am only
> able to put
> this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> complex and
> currently have it hidden under the wooden balcony of the apartment above
> me. The
> SWR is currently about 1.8 at 50 MHz. If I tune the frequency either up
> or down on
> the analyzer the SWR goes up. Does this mean that the antenna is tuned
> as good as
> is 'possible' and the high SWR is because of the location or will more
> diligent work
> in tuning help? I think this is just because of the low height but I
> defer to those more
> knowledgeable. :-)

At resonance (for all practical purposes, the point at which the SWR is lowest), a half wave dipole will typically have an input resistance of around 50 - 100 ohms, depending on height and ground characteristics. So an SWR of 1.8:1 isn't surprising. Since it goes up in either direction as you change frequency, you won't be able to do any better than this by adjusting the element lengths. Changing the antenna height might make it go either up or down, but trading SWR for a lower antenna is a bad trade.

Also, can you think of anything that will help to
> lower this SWR?
> Grounding something? Standing on my head in a bucket of water? :-)

Build or buy an antenna tuner (transmatch), or build a simple L network for matching. You can find information about this in the ARRL Antenna Book. But why bother? Unless your feedline is really long or really small, or unless your transmitter won't deliver full power into 1.8:1 (unlikely), lowering the SWR won't accomplish anything at all.

> I
> have not
> been able to even hear anything on the radio yet let alone make any
> contacts and

> wonder if this is part of my problem.

Nope. The SWR isn't your problem. If I were you I'd stop fiddling with the SWR and look elsewhere. Is your radio broken? Where do you live? Is there a lot of 6 meter activity there? Can you make arrangements for a schedule with a local ham to test your rig?

> I know the location and height
> are not ideal
> but it is what I have to work with. I can get lower SWR in the
> apartment but every
> time I key the mic I come blasting through my pc speakers and stereo
> (even though it
> is turned off).
>
> One last thing. If this is the antenna:
> b
> A ----------------------{}----------------------- A
> b
>
> Which directions are forward and back? A or B?
> Does that make sense?

The signal will be strongest broadside to the antenna. That's 'b' in your diagram. It decreases pretty slowly as you get off center, and will be noticably weaker off the ends ('A').

>
> Thanks a lot
> Joe
> KB9WFK

Roy Lewallen, W7EL

3049. Re: THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <t6orss8gjvecs1j9q390rvkjncicnbsebo@4ax.com>
Source record: 179771
Body handling: HTML body converted to readable text

This has nothing to do with fractal antennas....

...or does it?

::Cackle::

-SSB

On or about 23 Sep 00 23:55:28 GMT, bmullins@henry-net.COM (BUCK and
BOBBI), using the forum rec.radio.amateur.antenna did say:

:This is a multi-part message in MIME format.
:
:------=_NextPart_000_0005_01C02598.3DD80D80
:Content-Type: text/plain;
: charset="iso-8859-1"
:Content-Transfer-Encoding: quoted-printable
:
:THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)
:Email: bmullins@henry-net.com
:Date: 9/222/00
:Time: 6:35p.m.
:
:Message:
:
:READING THIS COULD CHANGE YOUR LIFE! I found this=20
:on a=20
:bulletin board and decided to try it. A little while back, I was =
:browsing=20
:through newsgroups, just like you are now, and came across an article=20
:similar to this that said you could make thousands of dollars within=20
:weeks with only an initial investment of $6.00! So I thought, "Yeah=20
:right, this must be a scam", but like most of us, I was curious, so I =
:kept=20
:reading. Anyway, it said that you send $1.00 to each of the 6 names=20
:and address stated in the article. You then place your own name and=20
:address in the bottom of the list at #6, and post the article in at =
:least=20
:200 newsgroups. (There are thousands) No catch, that was it. So after=20
:thinking it over, and talking to a few people first, I thought about =
:trying=20
:it. I figured: "what have I got to lose except 6 stamps and $6.00, =
:right?"=20
:Then I invested the measly $6.00. Well GUESS WHAT!!...within 7=20
:days, I started getting money in the mail! I was shocked! I figured it=20

:would end soon, but the money just kept coming in. In my first week, I=20
:made about $25.00. By the end of the second week I had made a total=20
:of over $1,000.00! In the third week I had over $10,000.00 and it's =
:still
:growing. This is now my fourth week and I have made a total of just=20
:over $42,000.00 and it still coming in rapidly. It's certainly worth=20
:$6.00, & 6 stamps, I have spent more than that on the lottery!! Let me=20
:tell you how=20
:this works and most importantly, why it works....Also, make sure you=20
:print a copy of this article NOW, so you can get the information off of=20
:it as you need it. I promise you that if you follow the directions =
:exactly,=20
:that you will start making more money than you thought possible by=20
:doing something so easy! Suggestion: Read this entire message=20
:carefully! (print it out or download it.) Follow the simple directions =
:and=20
:watch the money come in! It's easy. It's legal. And, your investment is=20
:only $6.00 (Plus postage) IMPORTANT:=20
:This is not a rip-off; it is not indecent; it is not illegal; and it is =
:virtually=20
:no risk - it really works!!!! If all of the following instructions are=20
:adhered to, you will
:receive extraordinary dividends. PLEASE NOTE: Please follow these
:directions EXACTLY, and $50,000 or more can be yours in 20 to 60=20
:days. This program remains successful because of the honesty and=20
:integrity of the participants. Please continue its success by carefully=20
:adhering to the instructions. You will now become part of the Mail=20
:Order business. In this business your product is not solid and tangible, =
:
:it's a service. You=20
:are in the business of developing Mailing Lists. Many large=20
:corporations are happy to pay big bucks for quality lists. However,=20
:the money made from the
:mailing lists is secondary to the income which is made from people=20
:like you and me asking to be included in that list. Here are the 4 easy=20
:steps to success: STEP 1: Get 6 separate pieces of paper and write the=20
:following on each piece of paper "PLEASE PUT ME ON YOUR=20
:MAILING LIST." Now get 6 US $1.00 bills and place ONE inside=20
:EACH of the 6 pieces of paper so the bill will not be seen through the=20
:envelope (to prevent thievery). Next, place one paper in each of the 6=20
:envelopes and seal them. You should now have 6 sealed envelopes,=20
:each with a piece of paper stating the above phrase, your name and=20
:address, and a $1.00 bill. What you are doing is creating a service.=20
:THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate=20
:service and you are paying for it! Like most of us I was a little=20
:skeptical and a little worried about the legal aspects of it all. So I=20
:checked it out with the U.S. Post Office (1-800-725-2161) and they=20
:confirmed that it is indeed legal! Mail the 6 envelopes to the following =
:
:addresses:

:
:#1) Samantha Blizniak, 7937 S. Newcastle, Burbank, IL 60459
:
:#2)Katie Wiess, 14 White Tail Lane, Wallingford, CT 06492
:
:#3)Traci Wood, 4224 Carnwath Rd., Tallahassee, FL 32303
:
:
:#4)Milissa Crook, 3730 South 255th Place, Kent, WA 98032
:
:#5)James Buckner, 11903 Coit RD. #1803 Dallas, TX 75251
:
:#6)Bobbi Mullins, 31 Sunnydale Lane, Napoleon, OH 43545
:
:STEP 2: Now take the #1 name off the list that you see above, move=20
:the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR=20
:Name as number 6 on the list. STEP 3: Change anything you need to,=20
:but try to keep this article as close to original as possible. Now, post =
:
:your amended article to at least 200 newsgroups. (I think there are=20
:close to 24,000 groups) All you need is 200, but remember, the more=20
:you post, the more money you make! This is perfectly legal! If you=20
:have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal=20
:lottery laws. Keep a copy of these steps for yourself and, whenever=20
:you need money, you can use it again, and again. PLEASE
:REMEMBER that this program remains successful because of the=20
:honesty & integrity of the participants & by their carefully adhering to =
:
:the directions. Look at it this way. If you are of integrity, the =
:program=20
:will continue and the money that so many others have received will=20
:come your way. NOTE: You may want to retain every name and=20
:address sent to you, either on a computer or hard copy and keep the=20
:notes people send you. This VERIFIES that you are truly providing a=20
:service. (Also, it might be a good idea to wrap the $1 bill in dark =
:paper=20
:to reduce the risk of mail theft.) So, as each post is downloaded and =
:the=20
:directions carefully followed, six members will be reimbursed for their=20
:participation as a List Developer with one dollar each. Your name will=20
:move up the list geometrically so that when your name reaches the #1=20
:position you will be receiving thousands of dollars in CASH!!! What an=20
:opportunity for only $6.00 ($1.00 for each of the first six=20
:people listed above) Send it now, add your own name to the list and=20
:you're in business!=20
:---DIRECTIONS -----=20
:FOR HOW TO POST TO NEWSGROUPS----------=20
:Step 1) You do not need to re-type this entire letter to do your own=20
:posting. Simply put your cursor at the beginning of this letter and drag =
:

:your cursor to the bottom of this document, and select 'copy' from the=20
:edit menu. This will copy the entire letter into the computer's memory.
:Step 2) Open a blank 'notepad' file and place your cursor at the top of=20
:the blank page. From the 'edit' menu select 'paste'. This will paste a=20
:copy of the letter into notepad so that you can add your name to the
:list.=20
:Step 3) Save your new notepad file as a .txt file. If you want to do =
:your=20
:postings in different settings, you'll always have this file to go back =
:to.=20
:Step 4) Use Netscape or Internet explorer and try searching for various=20
:newsgroups (on-line forums, message boards, chat sites, discussions.)
:Step 5) Visit these message boards and post this article as a new=20
:message by highlighting the text of this letter and selecting paste from =
:
:the edit menu. Fill in the Subject, this will be the header that =
:everyone=20
:sees as they scroll through the list of postings in a particular group,
:click the post message button. You're done with your first one!
:Congratulations...THAT'S IT! All you have to do is jump to different=20
:newsgroups and post away, after you get the hang of it, it will take=20
:about 30 seconds for each newsgroup! **REMEMBER, THE MORE=20
:NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL=20
:MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's=20
:it! You will begin receiving money from around the world within days!=20
:You may eventually want to rent a P.O.Box due to the large amount of=20
:mail you will receive. If you wish to stay anonymous, you can invent a=20
:name to use, as long as the postman will deliver it. **JUST MAKE
:SURE ALL THE ADDRESSES ARE=20
:CORRECT.** Now the WHY part: Out of 200 postings, say I receive=20
:only 5 replies (a very low example). So then I made $5.00 with my
:name at #6 on the letter. Now, each of the 5 persons who just sent me=20
:$1.00 make the MINIMUM 200 postings, each with my name at #5=20
:and only 5 persons respond to each of the original 5, that is another=20
:$25.00 for me, now those 25 each make 200 MINIMUM posts with=20
:my name at #4 and only 5 replies each, I will bring in an additional=20
:$125.00! Now, those 125 persons turn around and post the MINIMUM=20
:200 with my name at #3 and only receive 5 replies each, I will make an=20
:additional $626.00! OK, now here is the fun part, each of those 625=20
:persons post a MINIMUM 200 letters with my name at #2 and they=20
:each only receive 5 replies, that just made me $3,125.00!!!=20
:Those 3,125 persons will all deliver this message to 200 newsgroups
:with my name at #1 and if still 5 persons per 200 newsgroups react I=20
:will receive $15,625,00! With an original investment of only $6.00!=20
:AMAZING! When your name is no longer on the list, you just take the=20
:latest posting in the newsgroups, and send out another $6.00 to names=20
:on the list, putting your name at number 6 again. And start posting=20
:again. The thing to remember is: do you realize that thousands of=20
:people all over the world are joining the internet and reading these
:articles everyday?, JUST LIKE YOU are now!! So, can you afford

:$6.00 and see if it really works?? I think so... People have said, "what
:if the plan is played out and no one sends you the money? So what!
:What are the chances of that happening when there are tons of new
:honest users and new honest people who are joining the internet and
:newsgroups everyday and are willing to give it a try? Estimates are at=20
:20,000 to 50,000 new users, every day, with thousands of those
:joining the actual internet.Remember, play FAIRLY and HONESTLY
:and this will really work
:
:
:
:
:------=_NextPart_000_0005_01C02598.3DD80D80
:Content-Type: text/html;
: charset="iso-8859-1"
:Content-Transfer-Encoding: quoted-printable
:
:
:
:
:

:
:
THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM=20
:EDT)
Email:=20
:bmullins@henry-net.com
Date:=20
:9/222/00
Time: =
:6:35p.m.

Message:

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on a=20
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:newsgroups, just like you are now, and came across an article =
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similar to this that said you could make thousands =
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:within
weeks with only an initial =
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:of $6.00! So I thought, "Yeah

right, this=20
:must be a scam", but like most of us, I was curious, so I kept =
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:each of the 6=20
:names
and address stated in the =
:article. You=20
:then place your own name and
address in the=20
:bottom of the list at #6, and post the article in at least =
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200 newsgroups. (There are thousands) No catch, =
:that was it.=20
:So after
thinking it over, and =
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print a copy of this article NOW, so you can get =
:the=20

:information off of
it as you need =
:it. I=20
:promise you that if you follow the directions exactly,
that you will start making more money than you =
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:possible by
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:easy!=20
:Suggestion: Read this entire message
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:and
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:easy. It's=20
:legal. And, your investment is
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:(Plus postage) IMPORTANT:
This is =
:not a=20
:rip-off; it is not indecent; it is not illegal; and it is virtually=20
:
no risk - it really works!!!! If =
:all of the=20
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adhered to, you=20
:will
receive extraordinary =
:dividends. PLEASE=20
:NOTE: Please follow these
directions EXACTLY,=20
:and $50,000 or more can be yours in 20 to 60
days. This program remains successful because of the honesty =
:and=20
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integrity of the participants. =
:Please=20
:continue its success by carefully
adhering to=20
:the instructions. You will now become part of the Mail
Order business. In this business your product is =
:not solid and=20
:tangible,
it's a service. You=20
:
are in the business of developing =
:Mailing=20
:Lists. Many large
corporations =
:are happy to=20

:pay big bucks for quality lists. However,
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:money made from the
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:7937 S. Newcastle, Burbank, IL 60459

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:Tallahassee, FL 32303

:

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:WA 98032

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:
:------=_NextPart_000_0005_01C02598.3DD80D80--
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3050. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cde12e.6109028@news.akorn.net>
Source record: 179772
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

On Sun, 24 Sep 2000 08:42:21 GMT, Will <gwelfster@earthlink.net>
wrote:

>Unsure precisely what "gender" might mean as applied to an antenna, but
>guessing it may have something to do with design, I say such
>characteristics have a large impact on how much noise an antenna picks
>up. Monopoles are prone to be among the noisier antennas due to
>imbalance of currents.

Unbalance of current has nothing to do with noise pickup, unless you
are talking about feedline unbalance.

Noise, once it propageates a short distance, is exactly the same toi
the antenna as any other type of signal.

>It takes a very well engineered, large
>radial/counterpoise system for a monopole to approach the relative
>quietness of a dipole, let alone a closed loop.

What does a "closed loop" have to do with noise pickup?

Noise is an electromagnetic wave just like the signal from an
intentional transmitter. In close, within the nearfield and induction
foeld region, noise can be either electric or magnetic field dominant.

The reason a "dipole" is quiet is because noise, once it propagates
any distance along earth, has any horizontal components attenuated.
The same is true for any signal source, even intentional transmitters.
The dipole has two nulls, as well as poor response at low angles where
local noise comes from.

It is the pattern of the dipole that rejects noise, not the fact it is
balanced.

The same is true for the loop. It is the pattern of the loop that can
be used to reject noise, it has nothing to do with the fact it is
"closed".

A folded monopole is "closed", as is a folded dipole, and neither is
any different for noise pickup than the "unfolded" examples of each.
The exception is if the antenna is in incliment weatehr, and corona in
the antenna is involved.

>I have had all three up
>simultaneously, on an A/B/C switch, and my results have shown the
>typical, generally observed differences in received noise.

It isn't suprising the S/N is different. The antennas has different patterns. The one with the highest ratio of response in the direction and polarization of signal to response in direction and polarization of noise will always be the most quiet antenna.

>The most
>dramatic example of the effect of grounding on a monopole can be heard
>when using a random wire. With no ground, noise can easily rise above
>S9+. Connecting a ground, to a 8' CCS rod, will typically drop the noise
>by more than 20 dB.

That's because without a ground, the power line an house wiring and everything connected to them become part of the antenna system! The noisey wiring in the house become the counterpoise for the Marconi antenna.

It isn't because a "grounded antenna" is quieter, it's because you have eliminated or reduced common-mode coupling to the power lines!

>In dealing with nearby noise sources, like power lines, HV street lamps,
>and transformers, I have found that polarization of a receiving antenna
>is even more important than any directional characteristics of the
>antenna. Much of the noise-avoiding ability of yagis owes to their
>(usual) horizontal polarization, as it is a first principle of antenna
>theory and design that most manmade noise is *vertically* polarized.

Manmade noise is randomly polarized at the source. The fact is horizontal antennas have limited response along the horizon, and ground wave propagated horizontal components from noise sources are attenuated much more rapidly than vertically polarized components as they are propagated along the earth's suface.

It isn't because manmade noise is somehow magically vertically polarized, but rather how ALL signals propagate and how all antennas respond.

>The
>combined effects of polarization and a marginal counterpoise (which is
>typical, unless the ham has the space and takes the time to install a
>good one) make vertical monopoles the least desireable antennas in a
>noisy environment. The omni pattern of single verticals just makes
>things worse.

The "quietest" receiving antennas I have are arrays of short verticals.

The best receiving antenna in any environment depends on that environment. What works well in one place might be a "dog" at another.

Dipoles are just as susceptible as vertical monopoles to unwanted common mode currents. There is little difference between feeding a balanced dipole with an less than perfectly balanced line.... and feeding less than perfectly unbalanced monopole with an unbalanced line.

In either case the feedline choke will cure the problem.

The only thing that makes any antenna quieter than another, assuming you do nothing foolish in the installation and the noise source is not right next to the antenna, is the directional response of the antenna. You simply need a response null in the direction of noise that isn't also in the direction of the signal.

73 Tom

3051. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cde7ea.7833491@news.akorn.net>
Source record: 179773

On Sat, 23 Sep 2000 22:16:27 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Depth of wave penetration depends on wavelength, dielectric constant, >and conductivity. The soil behaves as a leaky capacitor.

Losses in the soil are complex, the soil acts like a large lossy media with phase shift. Visualizing the soil as a "leaky capacitor" paints a poor mental image of what really goes on.

73 Tom

3052. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cde907.8117996@news.akorn.net>
Source record: 179774

On Sat, 23 Sep 2000 20:39:52 -0500, Arthur Unwin <aunwin@fgi.net>
wrote:

>Tom,
>In this part of the country you could be lynched for using the term
>"dirt" in describing the countryside. I can only assume nothing
>grows where.you live.

Dirt is dirt down here. Cars are vehicles. Pepsi and other soft drinks
are all called "Cokes". Down here, a smarty Yankee would be lynched
for asking for a glass of "pop". Now that we are past the local
dialects....

> With regard to the use of concrete laced with reinforcement as
>a suitable ground connection, swimming pools are the exception here
>so are not used to tie a tower legs to ground, concrete seems
>to be the next best thing. Certainly better than just a hole in the,
>how is it that you say it ....."dirt".

Unless the swimming pool has a LOT of rebar that is bonded together,
it would make a poor ground. Fresh water is a poor conductor, moist
concrete is no better than moist earth.

>As concrete retains moisture its use has even more going for it

It retains moisture, but doesn't have anything special going for it
other than that.

I found some scholarly technical papers on the Web, and the only part
of concrete that "conducts" is the paste between the very poorly
conducting fill in the concrete. It has to be treated as a somewhat
resistive paste filled with non-conductive objects.

>With respect to voltage levels used for testing purposes, there
>is many an engineer out there that state, in error, that an electrical
>contact is mechanically open when using a Simpson
>that uses" low " (battery) voltage levels to test continuity

The statements made I questioned were:

>The NEC doesn't require that. But the Ufer will be there because it is the
>best practical lightning ground you can create.

That appears to be incorrect. Polyphasor as well as other sources say
a Ufer ground is not enough.

>The old wives' tales about exploding concrete are just that, old wives'
>tales.

Concrete can explode, if the ground system is poor or the path is through a small area of concrete. It won't with a proper grounding system, but the tales of concrete exploding are not necessarily all "old wive's tales".

>The reason this works is that concrete is a better conductor than >average dirt, so it spreads the strike current from the rebar more >effectively than can the ordinary dirt around a driven rod.

We still have no data to support that. Everything I can find says concrete, at very low frequencies is a "poor conductor". I compared a driven rod to a "poured in concrete rod" the same length. At least I did SOMETHING, other than pontificate.

If concrete was that good of a conductor, I would assume using the exact same test method it would indicate at least a somehwhat comparible resistance to dirt.

I did find a test on the Towertalk reflector someone did in 1997, where the base fed a tower set in concrete and found little impedance difference from an insulated tower worked against a radial system, not that that means much.

So what I'm looking for are resistivity numbers. The only things I can find indicate concrete varies widely in resistivity depending on the ratio of paste to non-conductive rock fillers and isn't all that good compared to dirt with the same moisture content.

73 Tom

3053. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CDEE65.5BE36866@bigfoot.com>
Source record: 179775
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

Tom W8JI wrote:
> What does a "closed loop" have to do with noise pickup?

He's probably talking about localized static noise caused by rain,
wind, and snow which is sometimes severe enough to cause arcing.
--
http://www.mindspring.com/~w6rca

3054. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CDEED2.5BDAA8A0@bigfoot.com>
Source record: 179776

Will wrote:
> For what you would spend for the B&W folded-dipole, you can easily pick
> up a 300W roller-type tuner.

His B&W is free.
--
http://www.mindspring.com/~w6rca

3055. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cdefc1.9839991@news.akorn.net>
Source record: 179777

On Sun, 24 Sep 2000 03:32:07 -0500, sideband@mindspring.com wrote:

>He's talking to himself again....
>
>
>> >>
>> >>> 73
>> >>> Chip n1IR
>> >>>
>> >>
>> >>w3rv
>> >
>>
>> 73
>> Chip N1IR

.....and you are all being trolled by the master troll.

Anyone with any background in antennas, operating, and propagation should know none of this has anything to do with how an antenna works, let along the advantages or disadvantages of one loading method over another.

It's all just a bunch of male hormone driven bar-room weenie wagging.

People fall back on this "I worked XX with my YY so it must be superior" crap when they have no technical arguments.

Chip can turn any technical discussion to a personal pissing contest because he is able toi sucessfully troll you fellows.

He has admitted his tiny-tot antenna only has 3 dBd or less gain. Big deal.

73 Tom

3056. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cdf192.10305636@news.akorn.net>
Source record: 179778

On Sun, 24 Sep 2000 04:08:57 GMT, "Chuck O'Neal" <coneal@ultranet.com>
wrote:

>A spike through a fractal head would do....
>
Death threat!

3057. Glass Mount Installation Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "G. M. Privette" <jmpl@mediaone.net>
Message-ID: <ltmz5.88496$56.415193@typhoon.jacksonville.mediaone.net>
Source record: 179779

I purchased a Valor/Pro-Am 2m/70cm Glass Mount Antenna (new). No
installation instructions included. My questions are:

1. How to orient the inside base? Can it be mounted in any orientation,
i.e. the coax connector pointing down, left or right?

2. How to orient the ground plane wire that is connected to the coax
connector? Can it point away from or toward the inside unit?

I read the installation instructions for the MFJ version of this antenna and
they say to orient the inside base with the coax connector pointing down.
The instruction for mounting the ground plane wire is confusing.

Any help and experiences with this antenna are appreciated.

Thanks,

Jerry, W4JX
email: w4jx@arrl.net

3058. ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924093246.13448.00000553@ng-cf1.aol.com>
Source record: 179780

>
>On Sun, 24 Sep 2000 03:32:07 -0500, sideband@mindspring.com wrote:
>
>>He's talking to himself again....
>>
>>
>>> >>
>>> >>> 73
>>> >>> Chip n1IR
>>> >>>
>>> >>
>>> >>w3rv
>>> >
>>>
>>> 73
>>> Chip N1IR
>
>......and you are all being trolled by the master troll.
>
>Anyone with any background in antennas, operating, and propagation
>should know none of this has anything to do with how an antenna works,
>let along the advantages or disadvantages of one loading method over
>another.
>
>It's all just a bunch of male hormone driven bar-room weenie wagging.
>
>People fall back on this "I worked XX with my YY so it must be
>superior" crap when they have no technical arguments.
>
>Chip can turn any technical discussion to a personal pissing contest
>because he is able toi sucessfully troll you fellows.
>
>He has admitted his tiny-tot antenna only has 3 dBd or less gain.

Or more. I was being conservative, for that F/B and SWR.

> Big
>deal.

Perhaps you can suggest a simple, high performance alternative that matches the performance and maintains the ease of construction, reliability, and so on. I will even suggest one for you: an H element. Try it and see. I did.

The FQY element
(See, for example,

.
http://www.fractenna.com/ham/hampage1.html)

is made from a single piece of wire, easily bent, constructed, and used. I have had mine up for 26 months WITHOUT REPAIR TO THE ANTENNA. It has withstood several Ice storms; a tornado; and countless no'reasters.

As a fractal element, it is part of the set of SHAPED ANTENNAE elements -- first pioneered by Landstorfer in 1976.

SHAPED ELEMENTS include: fractal antennas; genetic antennas (so-called); and knot elements. Much of the analytics of such antennas , except in specific or simple cases, is impossible to solve amd no closed form solutions have been articulated by Landstorfer or Cohen or Linden or Werner or anyone else.

Instead numerical solutions are EXPLORED.

Instead, for optimization purposes, one cannot take various derivatives and use standard optimization approaches.

Instead, for optimzation purposes, TOTALLY NUMERICAL engines are used which , in fact, do not in any way utilize the knowledge base of individuals, other than to set boundary conditions and articulate a figure of merit in the design. The fact is that your criticize of me also applies to the earlier use of this approach by Landstorfer and Sacher; and extends in criticism to such active users as: Haupt; Werner; Hohlfeld: Altschuler; Ramat-Samii; Werner; Linden; Mittra; and literally hundreds of other researchers and students.

Now: you may object to said approaches. That's OK. You may buck the extant frontiers of electromagnetics. {For a description of fractal antennas, knot antenna, and genetic antenna optimizations, see FRONTIERS IN ELECTROMAGNETICS(Werner and Mittra, IEEE Press,2000; Landstorfer's work is summaried in OPTIMIZATION OF WIRE ANTENNAS by Landstorfer and Sacher, Interscience, 1985).

What you CANNOT do is focus on me, as an individual, and vent your frustrations with it by personally attacking me, and even doing a death threat.

As an RF contractor for MFJ/ Enterprises (which include Hy Gain Antennas) it is of little consequence to you how these 'new' aspects of antenna design are done. However, you must realize that by personally attacking me, you also represent your affiliates, as,indeed, I do.

All this information I have posted on this NG, some many times. It is also readily accessible to anyone who undertakes literature searches.

So go ahead and say anything you want--TECHNICALLY. I do not feel oblifgated to correct you when you are wrong (which is often, as here).

But keep the personal attacks off the NG.

And watch the difference.

73
Chip N1IR
>

>73 Tom
>

3059. Re: A Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8ql02rbqc1@iac5.navix.net>
Source record: 179781

Sounds like something one of those English guys might have said. We all know
that they are in a "G" minority and probably not to be believed...:>)

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:8qivt8$kn8$1@neptunium.btinternet.com...
> A Quotation -
>
> "When you can measure what you are speaking about, and
> express it in numbers, you know something about it. But when
> you cannot measure it, when you cannot express it in
> numbers, your knowledge is of a meagre and unsatisfactory
> kind. It may be the beginning of knowledge but you have
> scarcely in your thoughts advanced to the state of science."
>
> William Thomson, Lord Kelvin, 1824-1907.
>
>

3060. F.S. CUSHCRAFT TRIBANDER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Dudley Davis <n4dpd_2000@yahoo.com>
Message-ID: <39CE09D7.9CAB1879@yahoo.com>
Source record: 179782
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Cushcraft Model A3S tribander in very good condition. Will work 10, 15 & 20 meter bands. Located in Southern New Jersey and easily accessible from Delaware, Maryland and PA.

$165.00 - You pickup. Antenna wrapped and ready to move.

Thanks, Dudley, N4DPD E-Mail - n4dpd@arrl.net

3061. Datas Belden H125 CH

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "Claus, DF8GH" <DF8GH@t-online.de>
Message-ID: <39CE1908.A0821113@t-online.de>
Source record: 179783

Hello group,

where can i get some more specific datas about the above 75 Ohm cable.
On the Belden site there is a huge amount of cables but a totally
different notation 9913,... etc and no H100, H500 H155, H2000 ...etc.

73 de Claus

3062. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CE0C6C.F6953750@hiwaay.net>
Source record: 179784

BULLSHI*

I hope this helps

Bill-W4BSG

Fractenna wrote:
>
> >
> >On Sun, 24 Sep 2000 03:32:07 -0500, sideband@mindspring.com wrote:
> >
> >>He's talking to himself again....
> >>
> >>
> >>> >>
> >>> >>> 73
> >>> >>> Chip n1IR
> >>> >>>
> >>> >>
> >>> >>w3rv
> >>> >
> >>>
> >>> 73
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> >
> >.....and you are all being trolled by the master troll.
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> >Anyone with any background in antennas, operating, and propagation
> >should know none of this has anything to do with how an antenna works,
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> >another.
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> >It's all just a bunch of male hormone driven bar-room weenie wagging.
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> >superior" crap when they have no technical arguments.
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> >He has admitted his tiny-tot antenna only has 3 dBd or less gain.
>
> Or more. I was being conservative, for that F/B and SWR.
>
> > Big

> >deal.
>
> Perhaps you can suggest a simple, high performance alternative that matches the
> performance and maintains the ease of construction, reliability, and so on. I
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> The FQY element
> (See, for example,
> .
> http://www.fractenna.com/ham/hampage1.html)
>
> is made from a single piece of wire, easily bent, constructed, and used. I
> have had mine up for 26 months WITHOUT REPAIR TO THE ANTENNA. It has withstood
> several Ice storms; a tornado; and countless no'reasters.
>
> As a fractal element, it is part of the set of SHAPED ANTENNAE elements --
> first pioneered by Landstorfer in 1976.
>
> SHAPED ELEMENTS include: fractal antennas; genetic antennas (so-called); and
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> simple cases, is impossible to solve amd no closed form solutions have been
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> Instead numerical solutions are EXPLORED.
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> Instead, for optimzation purposes, TOTALLY NUMERICAL engines are used which ,
> in fact, do not in any way utilize the knowledge base of individuals, other
> than to set boundary conditions and articulate a figure of merit in the design.
> The fact is that your criticize of me also applies to the earlier use of
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> active users as: Haupt; Werner; Hohlfeld: Altschuler; Ramat-Samii; Werner;
> Linden; Mittra; and literally hundreds of other researchers and students.
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> But keep the personal attacks off the NG.
>
> And watch the difference.
>
> 73
> Chip N1IR
> >
> >73 Tom
> >

3063. MFJ SWR ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Dudley Davis <n4dpd_2000@yahoo.com>
Message-ID: <39CE0E91.6E0295B9@yahoo.com>
Source record: 179785
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

MFJ HF/VHF antenna analyzer, Model MFJ - 249
in good condition. Recently installed new battery
holder from MFJ.

$120.00 plus shipping

Thanks, Dudley, N4DPD

E-Mail - n4dpd@arrl.net

3064. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CDFA4B.EEDA9FAF@dvol.com>
Source record: 179786

> Perhaps you can suggest a simple, high performance alternative that matches the
> performance and maintains the ease of construction, reliability, and so on. I
> will even suggest one for you: an H element. Try it and see. I did.
>
> The FQY element
> (See, for example,
> .
> http://www.fractenna.com/ham/hampage1.html)
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> active users as: Haupt; Werner; Hohlfeld: Altschuler; Ramat-Samii; Werner;
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>
> But keep the personal attacks off the NG.
>
> And watch the difference.
>
> 73
> Chip N1IR
> >
> >73 Tom
> >

>
Like Tom sed, Maybe 3dB on a clear dry day and a crappy F/B. Grad-school
circle-jerk. Ho-hum.
>
w3rv

3065. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CE1549.2257AB3A@fgi.net>
Source record: 179787

I would assume that the same occurs regarding penetration of
the earths upper layers i.e. multiple phase shifts with varying
density changes perhaps creating ducting until meeting with
a density change (dark side)for the desired phase change
for return to earth
Art Unwin KB9MZ
Tom W8JI wrote:

> On Sat, 23 Sep 2000 22:16:27 -0500 (CDT), richardharrison@webtv.net
> (Richard Harrison) wrote:
>
> >Depth of wave penetration depends on wavelength, dielectric constant,
> >and conductivity. The soil behaves as a leaky capacitor.
>
> Losses in the soil are complex, the soil acts like a large lossy media
> with phase shift. Visualizing the soil as a "leaky capacitor" paints a
> poor mental image of what really goes on.
>
> 73 Tom

3066. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: mikedon@primenet.com
Message-ID: <8ql41v$7re$1@nnrp1.phx.gblx.net>
Source record: 179788

George,

"Need" is a relative term. My Butternut vertical worked just fine without radials--enough to achieve DXCC anyway. Granted that the ground is a little on the moist side in Northern Illinois. And like I said, the efficiency is compromised. And the original question referred to having zero space anyway. to me that means no room for any radials.

The use of sixty radials is a throwback to broadcast station practice and certainly not necessary in amateur practice. The Butternut radial kit only has four of them. What difference do you belive might be heard on the receiving end of your transmissions by going from a few radials to 60?

Mike Donnelly
KG9M
Ex WD7M, KG9G

In article <39CD8754.D247F099@att.net>, "George, W5YR" <w5yr@att.net> wrote:
>Path:
> news.phx.gblx.net!nntp.primenet.com!nntp.gblx.net!newsfeed.skycache.com!Cidera
>!portc01.blue.aol.com!wn4feed!worldnet.att.net!135.173.83.19!wnmasters2!bgtnsc0
>7-news.ops.worldnet.att.net.POSTED!not-for-mail
>Message-ID: <39CD8754.D247F099@att.net>
>From: "George, W5YR" <w5yr@att.net>
>X-Mailer: Mozilla 4.74 [en] (Win95; U)
>X-Accept-Language: en
>MIME-Version: 1.0
>Newsgroups: rec.radio.amateur.antenna
>Subject: Re: Gap Titan DX
>References: <20000923054844.26590.00001199@ng-fi1.aol.com>
> <8qilhc$q97$1@nnrp1.phx.gblx.net>
>Content-Type: text/plain; charset=us-ascii
>Content-Transfer-Encoding: 7bit
>Lines: 24
>Date: Sun, 24 Sep 2000 04:48:23 GMT
>NNTP-Posting-Host: 12.86.153.40
>X-Complaints-To: abuse@worldnet.att.net
>X-Trace: bgtnsc07-news.ops.worldnet.att.net 969770903 12.86.153.40 (Sun, 24 Sep
> 2000 04:48:23 GMT)
>NNTP-Posting-Date: Sun, 24 Sep 2000 04:48:23 GMT
>Organization: AT&T Worldnet
>Xref: news.phx.gblx.net rec.radio.amateur.antenna:135331
>Status: N
>
>Sorry - the Butternut vertical DOES need radials. I operate mine over 60

>radials buried about an inch. Butternut makes it clear that their
>verticals do not work without a radial system.
>
>And mine is "very efficient."
>
>72/73, George W5YR - the Yellow Rose of Texas
>Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
>Amateur Radio W5YR, in the 55th year and it just keeps getting better!
>Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
>
>Mike Donnelly wrote:
>>
>> Be careful about the GAP Titan DX if you really have 0 space. It requires a
>> counterpoise system consisting of four rods that are 80 inches long. The ends
>> are wired together, so you end up with nearly a 14 foot diagonal "box" shape
>> at the base.
>>
>> That took it out of the running for me. Actually all of the pseudo-half-wave
>> veticals need a counterpoise system at the base, although most a a little
>> smaller than the GAP Titan. You might try a Butternut vertical and just
> forget
>> about the need for radials. Not very efficient, but it needs no ground space.
>>

3067. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39ce090e.685862@news.mcn.org>
Source record: 179789

On 21 Sep 2000 13:46:01 GMT, fractenna@aol.com (Fractenna) wrote:

>Congrats to Sarah for placing second in the CS Science fair (silver medal in
>Electronics category)! Sara did a study on improving performance on a 'quadgi'
>by using fractal elements.
>
>I corresponded with her dad in the Spring. She's worked very hard and done a
>great job!
>
>Sara got some folks at TRW to volunteer some chamber time to corroborate her
>range measurements.
>
>As a professor, I am very gratified that young people have seen how useful,
>accessible, and rewarding it is to explore fractal antenna technology. As with
>Sara, I encourage all hams to experiment with this exciting new technology!
>

Yes, Sarah was able to compete her project with very little if any of
your help. I know Sarah and her Dad very well they are members of the
local radio club of which I'm a member...

When I read you post I checked with her father as to your corsponding
with him on Sarah's project. Here's his reply to my query

"No Chip didn't really provide Sara with any info, other that the
minimal stuff available on his web site. He did send an e-mail after
he heard about her project (before the state science fair), but never
responded to her reply. He doesn't seem all that interested in
sharing info with much ofanyone."

Your implying that you *helped* is disgraceful.

Danny

3068. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CE185E.F8F017DF@fgi.net>
Source record: 179790

Tom
That is the sort of response one would expect from a
knowledgable person and which attracts me to this
type of newsgroup
I wish you would do more of it and not be lured so
easily to the trashy side or am I being to selfish
Best Regards
Art Unwin KB9MZ
Tom W8JI wrote:

> On Sat, 23 Sep 2000 20:39:52 -0500, Arthur Unwin <aunwin@fgi.net>
> wrote:
>
> >Tom,
> >In this part of the country you could be lynched for using the term
> >"dirt" in describing the countryside. I can only assume nothing
> >grows where.you live.
>
> Dirt is dirt down here. Cars are vehicles. Pepsi and other soft drinks
> are all called "Cokes". Down here, a smarty Yankee would be lynched
> for asking for a glass of "pop". Now that we are past the local
> dialects....
>
> > With regard to the use of concrete laced with reinforcement as
> >a suitable ground connection, swimming pools are the exception here
> >so are not used to tie a tower legs to ground, concrete seems
> >to be the next best thing. Certainly better than just a hole in the,
> >how is it that you say it ....."dirt".
>
> Unless the swimming pool has a LOT of rebar that is bonded together,
> it would make a poor ground. Fresh water is a poor conductor, moist
> concrete is no better than moist earth.
>
> >As concrete retains moisture its use has even more going for it
>
> It retains moisture, but doesn't have anything special going for it
> other than that.
>
> I found some scholarly technical papers on the Web, and the only part
> of concrete that "conducts" is the paste between the very poorly
> conducting fill in the concrete. It has to be treated as a somewhat
> resistive paste filled with non-conductive objects.
>
> >With respect to voltage levels used for testing purposes, there

> >is many an engineer out there that state, in error, that an electrical
> >contact is mechanically open when using a Simpson
> >that uses" low " (battery) voltage levels to test continuity
>
> The statements made I questioned were:
>
> >The NEC doesn't require that. But the Ufer will be there because it is the
> >best practical lightning ground you can create.
>
> That appears to be incorrect. Polyphasor as well as other sources say
> a Ufer ground is not enough.
>
> >The old wives' tales about exploding concrete are just that, old wives'
> >tales.
>
> Concrete can explode, if the ground system is poor or the path is
> through a small area of concrete. It won't with a proper grounding
> system, but the tales of concrete exploding are not necessarily all
> "old wive's tales".
>
> >The reason this works is that concrete is a better conductor than
> >average dirt, so it spreads the strike current from the rebar more
> >effectively than can the ordinary dirt around a driven rod.
>
> We still have no data to support that. Everything I can find says
> concrete, at very low frequencies is a "poor conductor". I compared a
> driven rod to a "poured in concrete rod" the same length. At least I
> did SOMETHING, other than pontificate.
>
> If concrete was that good of a conductor, I would assume using the
> exact same test method it would indicate at least a somehwhat
> comparible resistance to dirt.
>
> I did find a test on the Towertalk reflector someone did in 1997,
> where the base fed a tower set in concrete and found little impedance
> difference from an insulated tower worked against a radial system,
> not that that means much.
>
> So what I'm looking for are resistivity numbers. The only things I can
> find indicate concrete varies widely in resistivity depending on the
> ratio of paste to non-conductive rock fillers and isn't all that good
> compared to dirt with the same moisture content.
>
> 73 Tom

3069. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924110030.21759.00000499@ng-cc1.aol.com>
Source record: 179791

>On 21 Sep 2000 13:46:01 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>Congrats to Sarah for placing second in the CS Science fair (silver medal in
>>Electronics category)! Sara did a study on improving performance on a
>'quadgi'
>>by using fractal elements.
>>
>>I corresponded with her dad in the Spring. She's worked very hard and done a
>>great job!
>>
>>Sara got some folks at TRW to volunteer some chamber time to corroborate her
>>range measurements.
>>
>>As a professor, I am very gratified that young people have seen how useful,
>>accessible, and rewarding it is to explore fractal antenna technology. As
>with
>>Sara, I encourage all hams to experiment with this exciting new technology!
>>
>
>Yes, Sarah was able to compete her project with very little if any of
>your help. I know Sarah and her Dad very well they are members of the
>local radio club of which I'm a member...
>
>When I read you post I checked with her father as to your corsponding
>with him on Sarah's project. Here's his reply to my query
>
>"No Chip didn't really provide Sara with any info, other that the
>minimal stuff available on his web site. He did send an e-mail after
>he heard about her project (before the state science fair), but never
>responded to her reply. He doesn't seem all that interested in
>sharing info with much ofanyone."
>
>Your implying that you *helped* is disgraceful.
>
>Danny

Excuse me;

I NEVER, EVER received ANY CORRESPONDENCE of ANY KIND from Sara. Nor do I in ANY WAY claim to have helped her.

She did this on her own.

I e-mailed her dad congratulating her. He wrote back detailing some of her work. Your assertion that I did not help her (when asked) is an abomination.

NC

3070. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924110129.21759.00000500@ng-cc1.aol.com>
Source record: 179792

>
>
>
>
>> Perhaps you can suggest a simple, high performance alternative that matches
>the
>> performance and maintains the ease of construction, reliability, and so on.
>I
>> will even suggest one for you: an H element. Try it and see. I did.
>>
>> The FQY element
>> (See, for example,
>> .
>> http://www.fractenna.com/ham/hampage1.html)
>>
>> is made from a single piece of wire, easily bent, constructed, and used. I
>> have had mine up for 26 months WITHOUT REPAIR TO THE ANTENNA. It has
>withstood
>> several Ice storms; a tornado; and countless no'reasters.
>>
>> As a fractal element, it is part of the set of SHAPED ANTENNAE elements --
>> first pioneered by Landstorfer in 1976.
>>
>> SHAPED ELEMENTS include: fractal antennas; genetic antennas (so-called);
>and
>> knot elements. Much of the analytics of such antennas , except in specific
>or
>> simple cases, is impossible to solve amd no closed form solutions have been
>> articulated by Landstorfer or Cohen or Linden or Werner or anyone else.
>>
>> Instead numerical solutions are EXPLORED.
>>
>> Instead, for optimization purposes, one cannot take various derivatives and
>use
>> standard optimization approaches.
>>
>> Instead, for optimzation purposes, TOTALLY NUMERICAL engines are used
>which ,
>> in fact, do not in any way utilize the knowledge base of individuals, other
>> than to set boundary conditions and articulate a figure of merit in the
>design.
>> The fact is that your criticize of me also applies to the earlier use of
>> this approach by Landstorfer and Sacher; and extends in criticism to such
>> active users as: Haupt; Werner; Hohlfeld: Altschuler; Ramat-Samii; Werner;

>> Linden; Mittra; and literally hundreds of other researchers and students.
>>
>> Now: you may object to said approaches. That's OK. You may buck the extant
>> frontiers of electromagnetics. {For a description of fractal antennas, knot
>> antenna, and genetic antenna optimizations, see FRONTIERS IN
>ELECTROMAGNETICS(
>> Werner and Mittra, IEEE Press,2000; Landstorfer's work is summaried in
>> OPTIMIZATION OF WIRE ANTENNAS by Landstorfer and Sacher, Interscience,
>1985).
>>
>> What you CANNOT do is focus on me, as an individual, and vent your
>frustrations
>> with it by personally attacking me, and even doing a death threat.
>>
>> As an RF contractor for MFJ/ Enterprises (which include Hy Gain Antennas)
>it is
>> of little consequence to you how these 'new' aspects of antenna design are
>> done. However, you must realize that by personally attacking me, you also
>> represent your affiliates, as,indeed, I do.
>>
>> All this information I have posted on this NG, some many times. It is also
>> readily accessible to anyone who undertakes literature searches.
>>
>> So go ahead and say anything you want--TECHNICALLY. I do not feel
>oblifgated to
>> correct you when you are wrong (which is often, as here).
>>
>> But keep the personal attacks off the NG.
>>
>> And watch the difference.
>>
>> 73
>> Chip N1IR
>> >
>> >73 Tom
>> >
>
>>
>Like Tom sed, Maybe 3dB on a clear dry day and a crappy F/B. Grad-school
>circle-jerk. Ho-hum.
>>
>w3rv
>

Please detail something better in that form factor.

73
Chip n1IR

3071. Re: channel 2 ant tv??? help.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <pjXqVHAytgz5Ewjd@g3ohx.demon.co.uk>
Source record: 179793

In article <9j1pss03dk97rvgbslr4vg59e8eo9bs4os@4ax.com>, Gary Coffman
<ke4zv@bellsouth.net> writes
>On Fri, 22 Sep 2000 00:55:56 -0500, kc5cqa <kc5cqa@devtex.net> wrote:
>>I am just considering" building a antenna for channel 2, out in my
>>area they have a new transmitter for channel, but I am right on the
>>''fringe '', anyone out there made anything close to this.?? Would
>>appreciate your input. I know I can go ''someplace'' and buy one, but
>>would like to try my hand and see what I come up with... Got the idea
>>because I took down some old tv antennas of my brother,(sold their
>>home,getting cable)and the fact that a new station moved into the
>>area. Well almost in my area, it is about 50 miles away. Hope you can
>>help. Callie Lorentson
>
>Ch 2 is close to the 6m amateur band, so dimensions can be scaled
>from an amateur beam shown in one of the antenna books. But, the
>TV channel is 6 MHz wide, and a normal yagi at this frequency will
>have insufficient bandwidth to handle the signal (for higher frequency
>channels, a normal yagi may suffice). The better approach for Ch 2
>is a log periodic antenna. Most commercially available TV antennas
>are of this type.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

Don't forget that the main benefit of log periodic antennas is their
wide bandwidth, not high gain.

In the USA, with the relatively large number of off-air VHF TV channels
available, the ultra-wideband type of antenna (lowband, highband, and
even UHF) is very common, but I doubt if the gain is much more than 3dB
or 4dB (please correct me if I'm wrong). You rarely see this type of
antenna in the in Europe, and even less so in the UK (we don't use VHF
for TV any more!).

The US TV channel is not really 6MHz wide - this is the spacing between
adjacent channels. It is really about 4.5 + 0.75 + 0.05 = 5.4MHz
(allowing for the vision-sound spacing + VSB + USB of FM sound
deviation). I would have thought that you could buy high-gain, single-
channel yagis specially designed for single-channel fringe area
reception (say 4 or 5 elements, or even more). However, I know that
'higher-gain, narrower-bandwidth' (by log-periodic standards) log-
periodics do exist (or can be made).

I don't doubt your abilities but, if you are more interested in getting good TV reception rather than experimenting with antenna construction, it might be better to get an antenna (with a good reputiation, of course) off the shelf.

Ian.

3072. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce1896.482781@news.akorn.net>
Source record: 179794
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

On Sun, 24 Sep 2000 07:07:01 -0500, CAM <cam2338@bigfoot.com> wrote:

>Tom W8JI wrote:
>> What does a "closed loop" have to do with noise pickup?
>
>He's probably talking about localized static noise caused by rain,
>wind, and snow which is sometimes severe enough to cause arcing.
>--
>http://www.mindspring.com/~w6rca

OK. In that case having a blunt conductor, and some form of DC
leakage to earth, will reduce noise. But that isn't loop specific.

The original post was talking about power line noise.

73 Tom

3073. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CE1988.B0F8051C@oio.net>
Source record: 179795

John Przychocki wrote:
>
> I'm looking into verticals that work on an 8 story building? It'll be
> about 120" up and with a contast wind. I live in brooklyn, NY about 2
> blocks from the water (NY Bay).
> I see that the ants. are a big tall, so I'm worried about wind since
> most look like multiple sections. And if the antenna has radials,
> those would have to be at least 10 feet off the roof (Fire code). I
> have an old Shakespeare Big Stick CB antenna that I have been using on
> 10m and the top half on that bends a lot and quite often I see the top
> section doing a 90 degree bend
>
> ANy help would be appreciated.

John,
Can't say much about using radials with the 10' height
requirement,
but as to the wind problem, guy the antenna. May have to use guy's on
multiple levels, but that should be no problem. It's always better to
'over-do' than to 're-do'...
'Doc

3074. FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924111259.21759.00000501@ng-cc1.aol.com>
Source record: 179796

This weekend, in just a few hours of operation, I acheived record QSO rates (for me) with the 10M Fractal Quad Yagi seen on:

http://www.fractenna.com/ham/hampage1.html

which details the outstanding performance characteristics and ease of construction. The antenna also appeared in (articles by other authors in) La Revisita, QTC, and 73 magazines and elsewhere.

My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived 335 Q/hr. On average it was 195 Q/hr.

At least 2 dozen times I received unsolicited comments which stated I was the strongest W on the band.

This is with a JST 245 on 10M phone.

I am now using a voice keyer, although I find that it is a real turn off to most CQ's, because it sounds so...unanimated.

73!

Chip N1IR

3075. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce194c.664120@news.akorn.net>
Source record: 179797

On Sun, 24 Sep 2000 14:10:46 GMT, k6mhe@arrl.net (Dan Richardson)
wrote:

>Yes, Sarah was able to compete her project with very little if any of
>your help. I know Sarah and her Dad very well they are members of the
>local radio club of which I'm a member...
>
>When I read you post I checked with her father as to your corsponding
>with him on Sarah's project. Here's his reply to my query
>
>"No Chip didn't really provide Sara with any info, other that the
>minimal stuff available on his web site. He did send an e-mail after
>he heard about her project (before the state science fair), but never
>responded to her reply. He doesn't seem all that interested in
>sharing info with much ofanyone."
>
>Your implying that you *helped* is disgraceful.
>
>Danny

Chip has lots of time to claim he is always helpful and argue with
everyone, even if he doesn't have time to help someone.

73 Tom

3076. Re: CHECK OUT THIS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CE1A82.E6C17F7F@oio.net>
Source record: 179798

SPAM SPAM SPAM SPAM

Why are you listing ~your~ ID as the referal?
Is it because you've found a 'new' way to con
people? I think so...
'Doc

3077. Re: A Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce1a90.987900@news.akorn.net>
Source record: 179799

On Sat, 23 Sep 2000 20:23:54 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>A Quotation -
>
>"When you can measure what you are speaking about, and
>express it in numbers, you know something about it. But when
>you cannot measure it, when you cannot express it in
>numbers, your knowledge is of a meagre and unsatisfactory
>kind. It may be the beginning of knowledge but you have
>scarcely in your thoughts advanced to the state of science."
>
>William Thomson, Lord Kelvin, 1824-1907.

Some people express things in simple single answers that can not be
expressed that way, and give incorrect answers.

Rem and Stimpy, 1991-1997

3078. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce1b28.1140365@news.akorn.net>
Source record: 179800

On 24 Sep 2000 13:32:46 GMT, fractenna@aol.com (Fractenna) wrote:

> is made from a single piece of wire, easily bent, constructed, and used. I
>have had mine up for 26 months WITHOUT REPAIR TO THE ANTENNA. It has withstood
>several Ice storms; a tornado; and countless no'reasters.

Please tell me the date of the tornado that struck your house.

I'd like to check it out.

73 Tom

3079. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39ce1ba5.1265310@news.akorn.net>
Source record: 179801

By the way Chip, I certainly hope you are continuing with your lawsuit, police reports, etc. Please don't let anyone discourage you, or else it will look like you are all hot air.

I just want to remind you I consider you socially and technically incompetent, and a troll who will do anything to get attention.

73 Tom

3080. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924113339.21823.00000471@ng-cc1.aol.com>
Source record: 179802

>Please tell me the date of the tornado that struck your house.
>
>I'd like to check it out.
>
>73 Tom
>
>
>
>
>
>

July 5, 1999. F1 Tornado.

It was witnessed, here, by 4 people. Damage included snapping a 14 inch oak tree and a 12 inch maple like tooth picks, at the 10-15 foot level.

It skimmed the area over a 3 mile swatch over Lexington, Arlmont, and Belmont.

I described this back on the NG some time back.

Best Regards,
Chip N1IR

3081. Hi all

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Mark Flanagan <markf@cshore.com>
Message-ID: <sss85u27s0hoa0@corp.supernews.com>
Source record: 179803

I recently got a used beam that's in great condition except for all the U bolts. What is a good source for stainless steel U bolts of various sizes? (either mail, internet or local type of store)

Mark, K1MKF

Please reply directly to markf@cshore.com

3082. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924114706.21823.00000474@ng-cc1.aol.com>
Source record: 179804

>
>On Sun, 24 Sep 2000 14:10:46 GMT, k6mhe@arrl.net (Dan Richardson)
>wrote:
>
>>Yes, Sarah was able to compete her project with very little if any of
>>your help. I know Sarah and her Dad very well they are members of the
>>local radio club of which I'm a member...
>>
>>When I read you post I checked with her father as to your corsponding
>>with him on Sarah's project. Here's his reply to my query
>>
>>"No Chip didn't really provide Sara with any info, other that the
>>minimal stuff available on his web site. He did send an e-mail after
>>he heard about her project (before the state science fair), but never
>>responded to her reply. He doesn't seem all that interested in
>>sharing info with much ofanyone."
>>
>>Your implying that you *helped* is disgraceful.
>>
>>Danny
>
>
>Chip has lots of time to claim he is always helpful and argue with
>everyone, even if he doesn't have time to help someone.
>
>73 Tom
>
>

This is a very serious claim. I will call Sara's father this afternoon. If he wishes, I will let him call my associate dean to discuss the issue.

I never had any contact from Sara. Ever. The contact was from me to her dad--congratulating her on Sara's previous (pre CS Sci fair) progress.

My policy regarding students is this: I am happy to help, but they need a faculty (or teacher)supervisor to e-mail me,stating the nature of the project and the person who will oversee the student. This prevents the temptation some students have of mis-using info provided, particlularly 'net info.

Plagiarism is rampant in higher education and the 'net is too easy for students to abuse.

An example of where I have aided a student (one of many) who proceeded in this way is:

http://www.eee.bham.ac.uk/com_gr/petersong/kochdipoles.htm

this is a student at the University of Birmingham , who did a very nice job.

My first obligation is to my students at my home intitution, but I am always happy to help for those who abide by my reasonable request. I must admit that I am astounded how many students do NOT proceed based on my request that they have a teacher drop me a line.

Hope this helps.

Nathan Cohen, Ph.D.

3083. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8ql7l6$al4$1@slb1.atl.mindspring.net>
Source record: 179805

I have finally figured out why this guy is so comical. He is the
re-incarnation of Leo Gorsey!

Dean Craft -- W4IHK

Fractenna wrote in message <20000924111259.21759.00000501@ng-cc1.aol.com>...
>
>
>I am now using a voice keyer, although I find that it is a real turn off to
>most CQ's, because it sounds so...unanimated.
>
>73!
>
>Chip N1IR

3084. Re: A Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39CE0B3B.1C40@pacbell.net>
Source record: 179806

Tom W8JI wrote:
>
> On Sat, 23 Sep 2000 20:23:54 +0100, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >A Quotation -
> >
> >"When you can measure what you are speaking about, and
> >express it in numbers, you know something about it. But when
> >you cannot measure it, when you cannot express it in
> >numbers, your knowledge is of a meagre and unsatisfactory
> >kind. It may be the beginning of knowledge but you have
> >scarcely in your thoughts advanced to the state of science."
> >
> >William Thomson, Lord Kelvin, 1824-1907.
>
> Some people express things in simple single answers that can not be
> expressed that way, and give incorrect answers.
>
> Rem and Stimpy, 1991-1997

Lord Kelvin was a fine physicist, but not omniscient. He was
able to express the age of the earth in a number, but that didn't
mean he understood geology. His number was, unfortunately, wrong.

Tom Donaly KA6RUH

3085. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CE2AC4.2FAB6265@bellatlantic.net>
Source record: 179807

Here's another thought:
Take your antenna and analyzer to a park or beach or parking lot -
anywhere where you can mount it in the clear for at least 20 feet
horizontally and at least 5 feet or higher above ground. Connect the
analyzer to the antenna with 20 feet of rg 58 and tune it for lowest
SWR. You need to be able to get to 1.2 to 1 or below. Then, add
a coax jumper about 3' long between the 20' coak and the analyzer.
If your SWR stays low, your antenna is in good shape. If you can't
get a low SWR, there's something wrong with the antenna, coax, or
analyzer.

I believe your 1:8 to 1 SWR is not due to its height - I suspect it is
due to being near the structure and balcony.

You might be able to make use of the building layout to install a 2
element outdoor beam! If the balcony above is about 10 feet wide,
you could mount a reflector on the face of the building. 3 feet
or more out from the building and in the same horizontal plane
of the reflector, install a pair of aluminum tubes separated by
about 2 - 3 inches. These will make a dipole. If you mount this
stuff sturdily, you can hang birdfeeders off the ends with fishing
line. Surely they'll allow birdfeeders! Now that "justifies" the
construction - all you need to do is feed it with coax and a
5 turn coil of #14. Use a broom handle as the coil form - you
spread or compress the turns to achieve resonance where
you want it. The coil goes in series with one element and the
center conductor of the coax. Hide all that junk - the coax
and coil - with the center support attached to the balcony
above. If you are clever and there is some latitude to allow
you to install this "birdfeeder" I think you can get away with it.
If you need exact dimensions, let me know - I'll go measure
the dipole I made with copper pipe that way. The elements
were cut a bit short - 48" if I remember.

By the way - "model" this antenna in that open space mentioned
earlier. You'll have to "Rube Goldberg" it a little - but with 6 meters
and above, it is easy enough to bring the pieces you need with you
and experiment in the open.

My thinking in this is as follows: basically, what you have now
is a unidirectional antenna, with some of the power wasted AND
creating a higher SWR. Make use of that by intentionally reflecting
the power and tuning the antenna for the change in impedance that
the reflected power causes. The reflector itself is easy to hide, as
it is mounted directly on the building. It can even be incorporated

as part of the support for the "birdfeeder". You already have the
problem of hiding the driven element with your two fiberglass whips,
so that problem exists whether we're talking beam or just dipole.

Finally, the driven element might be more hideable using a hairpin
match instead of a coil. You could even hairpin match the reflector!
To do that, you would first adjust the driven element without the
reflector installed. Then. install the reflector (two elements, just like
the driven element but a little longer, connected together by the hairpin)
and adjust the reflector hair pin for lowest SWR as measured at the
driven element feedpoint. Note that I have tried this in open air and
it works - but I've never tried either method with the reflector mounted
directly on the surface of the building. But it sure seems worth a try!

sideband@mindspring.com wrote:

> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also have
> the use of a MFJ
> 259 analyzer. The dipole is a metal bracket that allows 2 fiberglass
> whips to be
> attached to it, both with ends that allow them to be tuned. I am only
> able to put
> this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> complex and
> currently have it hidden under the wooden balcony of the apartment above
> me. The
> SWR is currently about 1.8 at 50 MHz. If I tune the frequency either up
> or down on
> the analyzer the SWR goes up. Does this mean that the antenna is tuned
> as good as
> is 'possible' and the high SWR is because of the location or will more
> diligent work
> in tuning help? I think this is just because of the low height but I
> defer to those more
> knowledgeable. :-) Also, can you think of anything that will help to
> lower this SWR?
> Grounding something? Standing on my head in a bucket of water? :-) I
> have not
> been able to even hear anything on the radio yet let alone make any
> contacts and
> wonder if this is part of my problem. I know the location and height
> are not ideal
> but it is what I have to work with. I can get lower SWR in the
> apartment but every
> time I key the mic I come blasting through my pc speakers and stereo
> (even though it
> is turned off).
>
> One last thing. If this is the antenna:
> b
> A ----------------------{}---------------------- A

> b
>
> Which directions are forward and back? A or B?
> Does that make sense?
>
> Thanks a lot
> Joe
> KB9WFK

3086. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000924122401.25753.00000755@ng-mg1.aol.com>
Source record: 179808

>This is with a JST 245 on 10M phone.<

JRC-245

Rick K1BQT

3087. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8ql9t1fna1@iac5.navix.net>
Source record: 179809

It is obvious you did nothing to help her, so why did you say "I corresponded with her father in the spring". Is this a fraudulent attempt to convince us that your were involved in a collaborative effort? Why are you trying to steal glory from this young girl? You are a cad Sir! Usurping Glory from this young girl is only a small step away from taking candy from a baby...

"Fractenna" <fractenna@aol.com> wrote in message news:20000924110030.21759.00000499@ng-cc1.aol.com...
> >On 21 Sep 2000 13:46:01 GMT, fractenna@aol.com (Fractenna) wrote:
> >
> >>Congrats to Sarah for placing second in the CS Science fair (silver medal in
> >>Electronics category)! Sara did a study on improving performance on a
> >'quadgi'
> >>by using fractal elements.
> >>
> >>I corresponded with her dad in the Spring. She's worked very hard and done a
> >>great job!
> >>
> >>Sara got some folks at TRW to volunteer some chamber time to corroborate her
> >>range measurements.
> >>
> >>As a professor, I am very gratified that young people have seen how useful,
> >>accessible, and rewarding it is to explore fractal antenna technology. As
> >with
> >>Sara, I encourage all hams to experiment with this exciting new technology!
> >>
> >
> >Yes, Sarah was able to compete her project with very little if any of
> >your help. I know Sarah and her Dad very well they are members of the
> >local radio club of which I'm a member...
> >
> >When I read you post I checked with her father as to your corsponding
> >with him on Sarah's project. Here's his reply to my query
> >
> >"No Chip didn't really provide Sara with any info, other that the
> >minimal stuff available on his web site. He did send an e-mail after
> >he heard about her project (before the state science fair), but never

> >responded to her reply. He doesn't seem all that interested in
> >sharing info with much ofanyone."
> >
> >Your implying that you *helped* is disgraceful.
> >
> >Danny
>
>
> Excuse me;
>
> I NEVER, EVER received ANY CORRESPONDENCE of ANY KIND from Sara. Nor do I
in
> ANY WAY claim to have helped her.
>
> She did this on her own.
>
>
> I e-mailed her dad congratulating her. He wrote back detailing some of her
> work. Your assertion that I did not help her (when asked) is an
abomination.
>
> NC

3088. Bobtail Curtain Plans- Help

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Marc <msdel4@postoffice.worldnet.att.net>
Message-ID: <39CE2B05.C210A970@postoffice.worldnet.att.net>
Source record: 179810

Does anyone have a good set of construction plans for the Bobtail Curtain with formulas? I want to build one for 17m. Have heard they are great and easy to build antennas. Feedline top, center vertical, or corner???
Thanks and 73,
Marc

3089. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924122943.03534.00000129@ng-cr1.aol.com>
Source record: 179811

>It is obvious you did nothing to help her, so why did you say "I
>corresponded with her father in the spring". Is this a fraudulent attempt to
>convince us that your were involved in a collaborative effort? Why are you
>trying to steal glory from this young girl? You are a cad Sir! Usurping
>Glory from this young girl is only a small step away from taking candy from
>a baby...
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000924110030.21759.00000499@ng-cc1.aol.com...
>> >On 21 Sep 2000 13:46:01 GMT, fractenna@aol.com (Fractenna) wrote:
>> >
>> >>Congrats to Sarah for placing second in the CS Science fair (silver
>medal in
>> >>Electronics category)! Sara did a study on improving performance on a
>> >'quadgi'
>> >>by using fractal elements.
>> >>
>> >>I corresponded with her dad in the Spring. She's worked very hard and
>done a
>> >>great job!
>> >>
>> >>Sara got some folks at TRW to volunteer some chamber time to corroborate
>her
>> >>range measurements.
>> >>
>> >>As a professor, I am very gratified that young people have seen how
>useful,
>> >>accessible, and rewarding it is to explore fractal antenna technology.
>As
>> >with
>> >>Sara, I encourage all hams to experiment with this exciting new
>technology!
>> >>
>> >
>> >Yes, Sarah was able to compete her project with very little if any of
>> >your help. I know Sarah and her Dad very well they are members of the
>> >local radio club of which I'm a member...
>> >
>> >When I read you post I checked with her father as to your corsponding
>> >with him on Sarah's project. Here's his reply to my query
>> >
>> >"No Chip didn't really provide Sara with any info, other that the
>> >minimal stuff available on his web site. He did send an e-mail after

>> >he heard about her project (before the state science fair), but never
>> >responded to her reply. He doesn't seem all that interested in
>> >sharing info with much ofanyone."
>> >
>> >Your implying that you *helped* is disgraceful.
>> >
>> >Danny
>>
>>
>> Excuse me;
>>
>> I NEVER, EVER received ANY CORRESPONDENCE of ANY KIND from Sara. Nor do I
>in
>> ANY WAY claim to have helped her.
>>
>> She did this on her own.
>>
>>
>> I e-mailed her dad congratulating her. He wrote back detailing some of her
>> work. Your assertion that I did not help her (when asked) is an
>abomination.
>>
>> NC

Go call her dad and ask.

NC

3090. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924123121.03534.00000130@ng-cr1.aol.com>
Source record: 179812

>
>>This is with a JST 245 on 10M phone.<
>
>JRC-245
>
>Rick K1BQT
>
>
>
>
>
>

Yesterday you called it a JVC:-)

Well, mine says "JST-245" Maybe that makes it rare and worth more:-)

BTW Rick, any idea who the idiots were who QRM'ed me this morning? I am not assuming it was you.

73
Chip N1IR

3091. Curtains or ???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: KA7WOC <bern@whidbey.com>
Message-ID: <sssblmljucoofc@corp.supernews.com>
Source record: 179813

Helping a friend hang wire today. He has a line up about 50-55 ft and approx. 225 long. We would appreciate some fairly specific information yielding a good 40 meter and up antenna. We have lots of wire and can feed with 450 ohm ladder or 50 ohm coax. He has one of the larger MJF tuners. Tnx

--
de Bob
KA7WOC

3092. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <ygqz5.209547$c5.4437809@news2.rdc1.on.home.com>
Source record: 179814

>
> Yes, Sarah was able to compete her project with very little if any of
> your help. I know Sarah and her Dad very well they are members of the
> local radio club of which I'm a member...
>
> When I read you post I checked with her father as to your corsponding
> with him on Sarah's project. Here's his reply to my query
>
> "No Chip didn't really provide Sara with any info, other that the
> minimal stuff available on his web site. He did send an e-mail after
> he heard about her project (before the state science fair), but never
> responded to her reply. He doesn't seem all that interested in
> sharing info with much ofanyone."
>
> Your implying that you *helped* is disgraceful.
>
> Danny

Maybe it was one of Chirp's other personalities that helped the young lady. Chirp you better check with the other people roaming around in your head.

Barry D.

3093. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CE2F63.126783FD@mindspring.com>
Source record: 179815

Will wrote:

> I am unclear whether you have made any adjustments to the "stingers" on
> the ends of your two fiberglass whips? If not, you might try shortening
> and lengthening them, and checking the results progressively on the
> analyzer. Shortening the elements will generally cause the resonant
> point to go up in frequency (which I think is what you want, since you
> quote measurements for 50 MHz, which I doubt is the *center* frequency
> you have in mind.), and vice-versa.

Actually 50.15 MHz is the center freq. This is ssb. Yes I have tuned the
stingers quite a bit to get it to this point.

> You might also check the area near
> where the antenna is hidden for pieces of metal--flashing, conduits,
> pipes, etc. that may be in effect de-tuning the antenna. If you find
> something like this, move the antenna if you can. Be sure as well that
> the antenna is put together correctly and is in good condition--i.e. no
> shorts or opens in the feedline or around the feedpoint especially. If
> none of this works, it is pretty easy to fashion a closed fullwave loop
> for 6-meters, and such an antenna is easily hidden in a location such as
> yours, since it is only about 5 feet on a side, and made of wire.
>
> de Will KD7BFX

The only metal would be nails used to put the deck together. There is a small
satellite dish for television on the deck above mine, but I don't think that
would make any difference. I really can't move the antenna away from there
anyway.

3094. Re: Best salty ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qlc22pqk1@neptunium.btinternet.com>
Source record: 179816

The most simple model of soil, rock, or what have you, is a capacitance in parallel a resistance. If you've ever heard about such clever, academic, mind-boggling things as complex dielectric constants, forget 'em.

Its much more simple than that.

Soil resistivity R is that which would be measured between opposite faces of of a 1 metre cube of the material.

The capacitance is that which would be measured between the opposite faces when the dielectric constant of the material is K, air being unity.

The capacitance is 8.85 * K picofarads. The reactance of this capacitance is in the same units as the resistance - it is in ohm.metres.

K can be anywhere between 3 and 80, typically concentrated between 9 and 15

A better wide-band model is C in parallel with R, both in parallel with another R and C in series. The R's and C's are proportioned according to the size of the solid particles in the soil relative to the remaining space occupied by moisture. Water has very high dielectric constant K = 80 and so the effective dielectric of a soil, as is its resistivity, is closely dependent on the distribution of particle size and shape and its moisture content. Arid soils, rocks and sand, are insulators with K around 3 to 5. Moist soils containing natural fertilising salts have R from 25 to 70, and K from 30 to 15

To understand more easily how this affects ground loss, ground reflections, ground propagation, etc., it is better to view a soil sample as an impedance, R+jX, where both R and X decrease with frequency. Impedance and ohms are quantities we are all familiar with. I have to stand on my head while performing a mental division before grasping the meaning of a number of milli-Siemens.

To investigate what happens in your back yard there is no alternative to making measurements on site. FCC curves will tell you no more than what can be deduced by running the soil through your fingers. Attempting to make precision measurements is a waste of time. Attach 20 or 30 percent or more to measurement uncertainties. Ignore HP, GR and W&G

claims. Banish all delusions of accuracy to the the
recycling bin.

But for most people it is sufficient to know only whether
the soil is good, bad or indifferent when a computer program
asks for ground information. With a good set of radials the
soil condition has only a minor effect on the performance of
a ground-mounted vertical antenna. And an even smaller
effect on a well elevated array. Other environmental
factors such as the presence of feedline, towers, buildings,
building contents, forests, overhead wires and a bus parked
across the road result in greater uncertainties.
--
Reg.

Tom W8JI <2w8ji@contesting.com> wrote in message
news:39cde7ea.7833491@news.akorn.net...
> On Sat, 23 Sep 2000 22:16:27 -0500 (CDT),
richardharrison@webtv.net
> (Richard Harrison) wrote:
>
> >Depth of wave penetration depends on wavelength,
dielectric constant,
> >and conductivity. The soil behaves as a leaky capacitor.
>
> Losses in the soil are complex, the soil acts like a large
lossy media
> with phase shift. Visualizing the soil as a "leaky
capacitor" paints a
> poor mental image of what really goes on.
>
> 73 Tom

3095. Re: A Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <9zLcXPAfniz5EwAI@ifwtech.demon.co.uk>
Source record: 179817

W4JLE wrote:
>Sounds like something one of those English guys might have said. We all know
>that they are in a "G" minority and probably not to be believed...:>)
>
>
>"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
>news:8qivt8$kn8$1@neptunium.btinternet.com...
>> A Quotation -
>>
>> "When you can measure what you are speaking about, and
>> express it in numbers, you know something about it. But when
>> you cannot measure it, when you cannot express it in
>> numbers, your knowledge is of a meagre and unsatisfactory
>> kind. It may be the beginning of knowledge but you have
>> scarcely in your thoughts advanced to the state of science."
>>
>> William Thomson, Lord Kelvin, 1824-1907.

Just be careful who ye're callin' a "G", mister...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3096. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CE320C.48FDD774@mindspring.com>
Source record: 179818

Thanks to everyone that answered so quickly. I am going to try a wire dipole and then maybe a loop and see what happens. Part of my concern of the 'high' SWR as this is only a 10 watt rig and if much of the signal is lost at such a low height...well..... Thanks again for all of the good and (I must add polite) speedy answers.
KB9WFK
joe

Roy Lewallen wrote:

> sideband@mindspring.com wrote:

3097. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924042543.13601.00000351@ng-cf1.aol.com>
Source record: 179862

>>
>> >Go for it
>> >>
>>
>> OK; here's what we do. You come over and babysit; and correct term papers;
>and
>> feed the dog; and visit my elderly aunts to check on them. In the mean
>time, I
>> will , selfishly, operate a 48 hour contest at some other QTH. .
>
>>
>Been there, done it gazillions of times under very similar condx. No
>different than
>going to LA or Chicago on biz for two days, the job gets done and nobody
>dies.
>Including the dog. If you had any real interest in doing the 'test at
>somebody
>else's qth you'd work it out.
>>
>
>>
>> I wasn't referring to brutal in an admirable sense.
>
>>
>I was. It's the esssence of competition. You think maybe football players
>take
>turns and say "'scuse me!" when they pile all over a runner already??
>>
>
>> What I mean is that Yuri
>> breaks laws by stomping on others (malicious interference; grabbing
>frequencies
>> already being used);
>
>>
>(a) Nobody guaranteed anybody a "clear freq". (b) Stomping has been SOP since
>the
>first ham contest whenever that was. If ya can't hold yer freq get a bigger
>antenna
>and/or radio or move up the band and ragchew. Like I sed, not for the
>thin-skinned,
>inept or whiners.
>>
>

>> not properly ID'ing; and so on.
>
>>
>If he didn't ID the other stations wouldn't know his call and the q wouldn't
>get in
>the logs. Lotsa contesters don't spit out their calls during every contact
>when
>they're running and the FCC has known that since whenever. To the best of my
>knowledge nobody has ever been spanked by the feds for this minor SOP
>infraction.
>I'm sure you've done 60 in 55mph zones and never got busted. The FCC doesn't
>have
>time to be anal, all they care abt is being able to identify the station when
>he
>does send his call.
>>>
>
>> >Running EUs on 80 & 75 is even more fun. Except ya need real ears and
>> >antennas and
>> >75 will still be there when 10 is dead as a doornail.
>> >>
>>
>> And, again: what this has to do with the 10M Contest is...(fill in blanks)
>
>>
>Has to with being a well-rounded op which is one thing working all bands in a
>'test
>does for you vs. hanging out, for instance, only on 10m where most of the
>sigs are
>10-20 over when the band is open and there's nobody home the rest of the
>time.
>>
>
>> >>
>> >We'll see how ya do in the 2006 10m 'test.
>>
>> Why would I possibly want to do this often? It really is a very selfish
>thing
>> for an adult to run away from other responsibilities many,many weekends in
>the
>> fall and winter.
>
>>
>Basically a failed troll, but two weekends a year, 1.1% of a year. Ask yer
>buddies
>who do fishing and hunting weekends how they pull it off.
>> >>
>
>> >>
>> >It's all in the skillset. Heh.

>> >>
>>
>> Hardly. CT makes sense on CW because it can send the call.
>
>>
>The phone guys mouth and keyboard at the same time.
>>
>>On 10M phone, I can remember whether I worked a station rather easily so
>
>> real-time duping won't be an issue, and if it is, I can use CT afterwards
>to
>> remove dupes.
>>
>> What I am ASKING is how do you use CT to TRANSCRIBE a contest log, rather
>than
>> having it grab times, and so on.
>
>>
>I can't answer yer question in any detail = dunno. The experienced CT gurus
>are
>accessible via the CT reflector. Dial up http://www.k1ea.com/ for the
>numerous CT
>resources.
>>
>
>> 73
>> Chip n1IR
>>
>
>w3rv

I've already won easern mass in DX Test.

Thanks.

73
N1IR

3098. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000924043853.13535.00000484@ng-cf1.aol.com>
Source record: 179863

>
>>>
>>> >Go for it
>>> >>
>>>
>>> OK; here's what we do. You come over and babysit; and correct term papers;
>>and
>>> feed the dog; and visit my elderly aunts to check on them. In the mean
>>time, I
>>> will , selfishly, operate a 48 hour contest at some other QTH. .
>>
>>>
>>Been there, done it gazillions of times under very similar condx. No
>>different than
>>going to LA or Chicago on biz for two days, the job gets done and nobody
>>dies.

I don't do business on weekends.

>>Including the dog. If you had any real interest in doing the 'test at
>>somebody
>>else's qth you'd work it out.
>>>
>>

I've operated from K1VR. Not anywhere near a whole weekend because I don't have
the time---as per description.

>>>
>>> I wasn't referring to brutal in an admirable sense.
>>
>>>
>>I was. It's the esssence of competition. You think maybe football players
>>take
>>turns and say "'scuse me!" when they pile all over a runner already??

If football players break the rules they get booted from the game.

>>>
>>
>>> What I mean is that Yuri
>>> breaks laws by stomping on others (malicious interference; grabbing
>>frequencies
>>> already being used);
>>
>>>

>>(a) Nobody guaranteed anybody a "clear freq". (b) Stomping has been SOP
>since
>>the
>>first ham contest whenever that was. If ya can't hold yer freq get a bigger
>>antenna
>>and/or radio or move up the band and ragchew. Like I sed, not for the
>>thin-skinned,
>>inept or whiners.
>>>

I notice you do not deny that Yuri does this and that it is illegal. No; I don;t see how this is acceptable.

You seem yo be under the impression that lots of people admire such behavior by the so-called 'top ops'.

It may be a shock for you to realize that they don't.

There are many stellar ops who never and did never do this.

K1VR is one.

In older times, W7RM was another. (God; there's an op!!)

>>
>>> not properly ID'ing; and so on.
>>
>>>
>>If he didn't ID the other stations wouldn't know his call and the q wouldn't
>>get in
>>the logs. Lotsa contesters don't spit out their calls during every contact
>>when
>>they're running and the FCC has known that since whenever.

I was referring to their full call;s not his. Nut again, we have an admission of illegal operating from you and an attemopt to justify!

IO To the best of my
>>knowledge nobody has ever been spanked by the feds for this minor SOP
>>infraction.

Sure they have.

>>I'm sure you've done 60 in 55mph zones and never got busted. The FCC doesn't
>>have
>>time to be anal, all they care abt is being able to identify the station
>when
>>he
>>does send his call.
>>>>
>>
>>> >Running EUs on 80 & 75 is even more fun. Except ya need real ears and
>>> >antennas and
>>> >75 will still be there when 10 is dead as a doornail.

>>> >>
>>>

>>> And, again: what this has to do with the 10M Contest is...(fill in blanks)
>>
>>>
>>Has to with being a well-rounded op which is one thing working all bands in
>a
>>'test
>>does for you vs. hanging out, for instance, only on 10m where most of the
>>sigs are
>>10-20 over when the band is open and there's nobody home the rest of the
>>time.
>>>
>>

For years now, Yuri has harped on how pooer the 10M FQY is. This challenge addresses that. :et him compete on this and then we can work our way up.

> >We'll see how ya do in the 2006 10m 'test.
>>>
>>> Why would I possibly want to do this often? It really is a very selfish
>>thing
>>> for an adult to run away from other responsibilities many,many weekends in
>>the
>>> fall and winter.
>>
>>>
>>Basically a failed troll, but two weekends a year, 1.1% of a year. Ask yer
>>buddies
>>who do fishing and hunting weekends how they pull it off.
>>> >>

What is a failed troll?? Don't understand meaning or relevancy.

I don't have any buddies who go hunting or fishing for the weekends.

>>> >>
>>> >It's all in the skillset. Heh.
>>> >>
>>>
>>> Hardly. CT makes sense on CW because it can send the call.
>>
>>>
>>The phone guys mouth and keyboard at the same time.

There is no question that this slows down the operation. What you are REALLY tring to say is that you give up operating efficiency in turn for accuracy in real-time.

>>>
>>>On 10M phone, I can remember whether I worked a station rather easily so
>>

>>> real-time duping won't be an issue, and if it is, I can use CT afterwards
>>to
>>> remove dupes.
>>>
>>> What I am ASKING is how do you use CT to TRANSCRIBE a contest log, rather
>>than
>>> having it grab times, and so on.
>>
>>>
>>I can't answer yer question in any detail = dunno. The experienced CT gurus
>>are
>>accessible via the CT reflector. Dial up http://www.k1ea.com/ for the
>>numerous CT
>>resources.
>>>

Yes; I was asking YOU.

>>
>>> 73
>>> Chip n1IR
>>>
>>
>>w3rv
>

73
Chip N1IR

3099. Re: Power lines: how far is far enough

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39CDBE6B.D4DC6555@earthlink.net>
Source record: 179864
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

Unsure precisely what "gender" might mean as applied to an antenna, but guessing it may have something to do with design, I say such characteristics have a large impact on how much noise an antenna picks up. Monopoles are prone to be among the noisier antennas due to imbalance of currents. It takes a very well engineered, large radial/counterpoise system for a monopole to approach the relative quietness of a dipole, let alone a closed loop. I have had all three up simultaneously, on an A/B/C switch, and my results have shown the typical, generally observed differences in received noise. The most dramatic example of the effect of grounding on a monopole can be heard when using a random wire. With no ground, noise can easily rise above S9+. Connecting a ground, to a 8' CCS rod, will typically drop the noise by more than 20 dB.

In dealing with nearby noise sources, like power lines, HV street lamps, and transformers, I have found that polarization of a receiving antenna is even more important than any directional characteristics of the antenna. Much of the noise-avoiding ability of yagis owes to their (usual) horizontal polarization, as it is a first principle of antenna theory and design that most manmade noise is *vertically* polarized. The combined effects of polarization and a marginal counterpoise (which is typical, unless the ham has the space and takes the time to install a good one) make vertical monopoles the least desireable antennas in a noisy environment. The omni pattern of single verticals just makes things worse.

de Will KD7BFX

Tom W8JI wrote:
>
> On Sat, 23 Sep 2000 09:57:36 GMT, "Thomas C. Sefranek"
> <tcs@cmcorp.com> wrote:
>
> >Loops seem to do a good job at rejecting power line noise.
> >Verticals are the worst!
>
> The "gender" of the antenna makes no difference. The directional
> characteristics do.
>
> Any antenna that has poor response in the directon of the noise source
> will reduce the noise. The "most quiet" receiving antennas I have are
> directional arrays of verticals because they have a sharp resonse lobe
> I can focus away from noise sources.
>

> The problem with big power lines is you can be totally "stuck" not
> being able to hear weak signals in the direction of the power line if
> they "act up", which they often do.
>
> 73 Tom

3100. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CDBC07.ED121475@mindspring.com>
Source record: 179865

He's talking to himself again....

> >>
> >>> 73
> >>> Chip n1IR
> >>>
> >>
> >>w3rv
> >
>
> 73
> Chip N1IR

-

3101. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39CDC174.F90D7EC2@earthlink.net>
Source record: 179866

For what you would spend for the B&W folded-dipole, you can easily pick up a 300W roller-type tuner. Add a spool of wire, and you have an antenna that almost certainly will outperform the B&W, on most frequencies/bands. If one wire configuration doesn't work, or your needs and preferences change, a few dollars of wire gets you an entirely new antenna, using the tuner. Unless they are very badly abused, tuners last almost a lifetime. The little MFJ "random wire" tuner (model 16010 I believe) is inadequate for more than QRP transmitting levels, and in fact is marketed as an SWL antenna. The 941, or even better the 969, offer you *much* safer power handling and matching range. You can pick one up used for about 60-75% of what these sell for new. Several sellers advertise both models for significantly less than you can get them from MFJ direct, as well. You might invest in a used recent copy of the ARRL antenna handbook also, for a solid and thorough introduction to all aspects of antenna design, installation, and use.

de Will KD7BFX

Jnrv1978 wrote:
>
> Hi this is Jon again, the guy who made the original post. This last comment
> seems to tell me that even using a long wire up high, with an antenna tuner is
> a better alternative than the B&W antenna. Am I understanding you correctly?
> One reason I was looking at the B&W was that a friend was going to let me use
> his. That is part of the reason I said I was trying to watch my pennies. I am
> on disability so money is scarce here. What about a long wire and the
> inexpensive tuner that MFJ has for a random length wire antenna? I do
> understand that most of you have said go di-pole, and I probably will include
> that also. No one has told me if these type of antennas are directional or omni
> directional. Thanks for your continuing input; I appreciate it all! Jon.

3102. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39CDC4B3.DD220154@earthlink.net>
Source record: 179867

I am unclear whether you have made any adjustments to the "stingers" on the ends of your two fiberglass whips? If not, you might try shortening and lengthening them, and checking the results progressively on the analyzer. Shortening the elements will generally cause the resonant point to go up in frequency (which I think is what you want, since you quote measurements for 50 MHz, which I doubt is the *center* frequency you have in mind.), and vice-versa. You might also check the area near where the antenna is hidden for pieces of metal--flashing, conduits, pipes, etc. that may be in effect de-tuning the antenna. If you find something like this, move the antenna if you can. Be sure as well that the antenna is put together correctly and is in good condition--i.e. no shorts or opens in the feedline or around the feedpoint especially. If none of this works, it is pretty easy to fashion a closed fullwave loop for 6-meters, and such an antenna is easily hidden in a location such as yours, since it is only about 5 feet on a side, and made of wire.

de Will KD7BFX

sideband@mindspring.com wrote:
>
> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also have
> the use of a MFJ
> 259 analyzer. The dipole is a metal bracket that allows 2 fiberglass
> whips to be
> attached to it, both with ends that allow them to be tuned. I am only
> able to put
> this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> complex and
> currently have it hidden under the wooden balcony of the apartment above
> me. The
> SWR is currently about 1.8 at 50 MHz. If I tune the frequency either up
> or down on
> the analyzer the SWR goes up. Does this mean that the antenna is tuned
> as good as
> is 'possible' and the high SWR is because of the location or will more
> diligent work
> in tuning help? I think this is just because of the low height but I
> defer to those more
> knowledgeable. :-) Also, can you think of anything that will help to
> lower this SWR?
> Grounding something? Standing on my head in a bucket of water? :-) I
> have not
> been able to even hear anything on the radio yet let alone make any
> contacts and
> wonder if this is part of my problem. I know the location and height

> are not ideal
> but it is what I have to work with. I can get lower SWR in the
> apartment but every
> time I key the mic I come blasting through my pc speakers and stereo
> (even though it
> is turned off).
>
> One last thing. If this is the antenna:
> b
> A ----------------------{}----------------------- A
> b
>
> Which directions are forward and back? A or B?
> Does that make sense?
>
> Thanks a lot
> Joe
> KB9WFK

3103. Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:00:00 UTC
From: k1dpm@aol.com
Message-ID: <20000924051133.16170.00001174@ng-cg1.aol.com>
Source record: 179868

Thanks to everyone who commented on this antenna and other alternatives. I have forwarded all of your comments to the person who needed help. Great group!
Dick Small
88 Hamilton St.
So. Portland, ME 04106
207-232-2256
Email K1DPM@aol.com
AMI MEMBER #1043

.

3104. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:56:43 UTC
From: jnrv1978@aol.com
Message-ID: <20000923205643.18375.00000357@ng-cb1.aol.com>
Source record: 179847

Hi this is Jon again, the guy who made the original post. This last comment seems to tell me that even using a long wire up high, with an antenna tuner is a better alternative than the B&W antenna. Am I understanding you correctly? One reason I was looking at the B&W was that a friend was going to let me use his. That is part of the reason I said I was trying to watch my pennies. I am on disability so money is scarce here. What about a long wire and the inexpensive tuner that MFJ has for a random length wire antenna? I do understand that most of you have said go di-pole, and I probably will include that also. No one has told me if these type of antennas are directional or omni directional. Thanks for your continuing input; I appreciate it all! Jon.

3105. Re: THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 00:58:51 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <flcz5.242661$i5.3281965@news1.frmt1.sfba.home.com>
Source record: 179848
Body handling: HTML body converted to readable text

Duck!! Incoming SPAM missles!

Mike Camp ki7fq
El Cerrito, CA.

"BUCK and BOBBI" wrote in message
news:000801c025d2$eb3a4bc0$0101a8c0@pavilion...
> This is a multi-part message in MIME format.
>
> ------=_NextPart_000_0005_01C02598.3DD80D80
> Content-Type: text/plain;
> charset="iso-8859-1"
> Content-Transfer-Encoding: quoted-printable
>
> THIS REALLY WORKS!!!!!!!!!!!! (9/6/00 04:40 PM EDT)
> Email: bmullins@henry-net.com
> Date: 9/222/00
> Time: 6:35p.m.
>
> Message:
>
> READING THIS COULD CHANGE YOUR LIFE! I found this=20
> on a=20
> bulletin board and decided to try it. A little while back, I was =
> browsing=20
> through newsgroups, just like you are now, and came across an article=20
> similar to this that said you could make thousands of dollars within=20
> weeks with only an initial investment of $6.00! So I thought, "Yeah=20
> right, this must be a scam", but like most of us, I was curious, so I =
> kept=20
> reading. Anyway, it said that you send $1.00 to each of the 6 names=20
> and address stated in the article. You then place your own name and=20
> address in the bottom of the list at #6, and post the article in at =
> least=20
> 200 newsgroups. (There are thousands) No catch, that was it. So after=20
> thinking it over, and talking to a few people first, I thought about =
> trying=20
> it. I figured: "what have I got to lose except 6 stamps and $6.00, =
> right?"=20
> Then I invested the measly $6.00. Well GUESS WHAT!!...within 7=20
> days, I started getting money in the mail! I was shocked! I figured it=20
> would end soon, but the money just kept coming in. In my first week, I=20
> made about $25.00. By the end of the second week I had made a total=20
> of over $1,000.00! In the third week I had over $10,000.00 and it's =

> still
> growing. This is now my fourth week and I have made a total of just=20
> over $42,000.00 and it still coming in rapidly. It's certainly worth=20
> $6.00, & 6 stamps, I have spent more than that on the lottery!! Let me=20
> tell you how=20
> this works and most importantly, why it works....Also, make sure you=20
> print a copy of this article NOW, so you can get the information off of=20
> it as you need it. I promise you that if you follow the directions =
> exactly,=20
> that you will start making more money than you thought possible by=20
> doing something so easy! Suggestion: Read this entire message=20
> carefully! (print it out or download it.) Follow the simple directions =
> and=20
> watch the money come in! It's easy. It's legal. And, your investment is=20
> only $6.00 (Plus postage) IMPORTANT:=20
> This is not a rip-off; it is not indecent; it is not illegal; and it is =
> virtually=20
> no risk - it really works!!!! If all of the following instructions are=20
> adhered to, you will
> receive extraordinary dividends. PLEASE NOTE: Please follow these
> directions EXACTLY, and $50,000 or more can be yours in 20 to 60=20
> days. This program remains successful because of the honesty and=20
> integrity of the participants. Please continue its success by carefully=20
> adhering to the instructions. You will now become part of the Mail=20
> Order business. In this business your product is not solid and tangible, =
>
> it's a service. You=20
> are in the business of developing Mailing Lists. Many large=20
> corporations are happy to pay big bucks for quality lists. However,=20
> the money made from the
> mailing lists is secondary to the income which is made from people=20
> like you and me asking to be included in that list. Here are the 4 easy=20
> steps to success: STEP 1: Get 6 separate pieces of paper and write the=20
> following on each piece of paper "PLEASE PUT ME ON YOUR=20
> MAILING LIST." Now get 6 US $1.00 bills and place ONE inside=20
> EACH of the 6 pieces of paper so the bill will not be seen through the=20
> envelope (to prevent thievery). Next, place one paper in each of the 6=20
> envelopes and seal them. You should now have 6 sealed envelopes,=20
> each with a piece of paper stating the above phrase, your name and=20
> address, and a $1.00 bill. What you are doing is creating a service.=20
> THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate=20
> service and you are paying for it! Like most of us I was a little=20
> skeptical and a little worried about the legal aspects of it all. So I=20
> checked it out with the U.S. Post Office (1-800-725-2161) and they=20
> confirmed that it is indeed legal! Mail the 6 envelopes to the following =
>
> addresses:
>
> #1) Samantha Blizniak, 7937 S. Newcastle, Burbank, IL 60459
>

> #2)Katie Wiess, 14 White Tail Lane, Wallingford, CT 06492
>
> #3)Traci Wood, 4224 Carnwath Rd., Tallahassee, FL 32303
>
>
> #4)Milissa Crook, 3730 South 255th Place, Kent, WA 98032
>
> #5)James Buckner, 11903 Coit RD. #1803 Dallas, TX 75251
>
> #6)Bobbi Mullins, 31 Sunnydale Lane, Napoleon, OH 43545
>
> STEP 2: Now take the #1 name off the list that you see above, move=20
> the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR=20
> Name as number 6 on the list. STEP 3: Change anything you need to,=20
> but try to keep this article as close to original as possible. Now, post =
>
> your amended article to at least 200 newsgroups. (I think there are=20
> close to 24,000 groups) All you need is 200, but remember, the more=20
> you post, the more money you make! This is perfectly legal! If you=20
> have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal=20
> lottery laws. Keep a copy of these steps for yourself and, whenever=20
> you need money, you can use it again, and again. PLEASE
> REMEMBER that this program remains successful because of the=20
> honesty & integrity of the participants & by their carefully adhering to =
>
> the directions. Look at it this way. If you are of integrity, the =
> program=20
> will continue and the money that so many others have received will=20
> come your way. NOTE: You may want to retain every name and=20
> address sent to you, either on a computer or hard copy and keep the=20
> notes people send you. This VERIFIES that you are truly providing a=20
> service. (Also, it might be a good idea to wrap the $1 bill in dark =
> paper=20
> to reduce the risk of mail theft.) So, as each post is downloaded and =
> the=20
> directions carefully followed, six members will be reimbursed for their=20
> participation as a List Developer with one dollar each. Your name will=20
> move up the list geometrically so that when your name reaches the #1=20
> position you will be receiving thousands of dollars in CASH!!! What an=20
> opportunity for only $6.00 ($1.00 for each of the first six=20
> people listed above) Send it now, add your own name to the list and=20
> you're in business!=20
> ---DIRECTIONS -----=20
> FOR HOW TO POST TO NEWSGROUPS----------=20
> Step 1) You do not need to re-type this entire letter to do your own=20
> posting. Simply put your cursor at the beginning of this letter and drag =
>
> your cursor to the bottom of this document, and select 'copy' from the=20
> edit menu. This will copy the entire letter into the computer's memory.
> Step 2) Open a blank 'notepad' file and place your cursor at the top of=20

> the blank page. From the 'edit' menu select 'paste'. This will paste a=20
> copy of the letter into notepad so that you can add your name to the
> list.=20
> Step 3) Save your new notepad file as a .txt file. If you want to do =
> your=20
> postings in different settings, you'll always have this file to go back =
> to.=20
> Step 4) Use Netscape or Internet explorer and try searching for various=20
> newsgroups (on-line forums, message boards, chat sites, discussions.)
> Step 5) Visit these message boards and post this article as a new=20
> message by highlighting the text of this letter and selecting paste from =
>
> the edit menu. Fill in the Subject, this will be the header that =
> everyone=20
> sees as they scroll through the list of postings in a particular group,
> click the post message button. You're done with your first one!
> Congratulations...THAT'S IT! All you have to do is jump to different=20
> newsgroups and post away, after you get the hang of it, it will take=20
> about 30 seconds for each newsgroup! **REMEMBER, THE MORE=20
> NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL=20
> MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's=20
> it! You will begin receiving money from around the world within days!=20
> You may eventually want to rent a P.O.Box due to the large amount of=20
> mail you will receive. If you wish to stay anonymous, you can invent a=20
> name to use, as long as the postman will deliver it. **JUST MAKE
> SURE ALL THE ADDRESSES ARE=20
> CORRECT.** Now the WHY part: Out of 200 postings, say I receive=20
> only 5 replies (a very low example). So then I made $5.00 with my
> name at #6 on the letter. Now, each of the 5 persons who just sent me=20
> $1.00 make the MINIMUM 200 postings, each with my name at #5=20
> and only 5 persons respond to each of the original 5, that is another=20
> $25.00 for me, now those 25 each make 200 MINIMUM posts with=20
> my name at #4 and only 5 replies each, I will bring in an additional=20
> $125.00! Now, those 125 persons turn around and post the MINIMUM=20
> 200 with my name at #3 and only receive 5 replies each, I will make an=20
> additional $626.00! OK, now here is the fun part, each of those 625=20
> persons post a MINIMUM 200 letters with my name at #2 and they=20
> each only receive 5 replies, that just made me $3,125.00!!!=20
> Those 3,125 persons will all deliver this message to 200 newsgroups
> with my name at #1 and if still 5 persons per 200 newsgroups react I=20
> will receive $15,625,00! With an original investment of only $6.00!=20
> AMAZING! When your name is no longer on the list, you just take the=20
> latest posting in the newsgroups, and send out another $6.00 to names=20
> on the list, putting your name at number 6 again. And start posting=20
> again. The thing to remember is: do you realize that thousands of=20
> people all over the world are joining the internet and reading these
> articles everyday?, JUST LIKE YOU are now!! So, can you afford
> $6.00 and see if it really works?? I think so... People have said, "what
> if the plan is played out and no one sends you the money? So what!
> What are the chances of that happening when there are tons of new

> honest users and new honest people who are joining the internet and
> newsgroups everyday and are willing to give it a try? Estimates are at=20
> 20,000 to 50,000 new users, every day, with thousands of those
> joining the actual internet.Remember, play FAIRLY and HONESTLY
> and this will really work
>
>
>
>
> ------=_NextPart_000_0005_01C02598.3DD80D80
> Content-Type: text/html;
> charset="iso-8859-1"
> Content-Transfer-Encoding: quoted-printable
>
>
>
>
>

>
>
THIS REALLY WORKS!!!!!!!!!!! (9/6/00 04:40 PM=20
> EDT)
Email:=20
> bmullins@henry-net.com
Date:=20
> 9/222/00
Time: =
> 6:35p.m.

face=3DArial size=3D2>Message:

size=3D2>READING THIS=20
> COULD CHANGE YOUR LIFE! I found this
size=3D2>on a=20
>
bulletin board and decided to try =
> it. A=20
> little while back, I was browsing
size=3D2>through=20
> newsgroups, just like you are now, and came across an article =
>
face=3DArial size=3D2>similar to this that said you could make thousands =
> of dollars=20
> within
weeks with only an initial =
> investment=20
> of $6.00! So I thought, "Yeah
size=3D2>right, this=20
> must be a scam", but like most of us, I was curious, so I kept =
>

face=3DArial size=3D2>reading. Anyway, it said that you send $1.00 to =
> each of the 6=20
> names
and address stated in the =
> article. You=20
> then place your own name and
size=3D2>address in the=20
> bottom of the list at #6, and post the article in at least =
>
face=3DArial size=3D2>200 newsgroups. (There are thousands) No catch, =
> that was it.=20
> So after
thinking it over, and =
> talking to a=20
> few people first, I thought about trying
size=3D2>it.=20
> I figured: "what have I got to lose except 6 stamps and $6.00, right?"=20
>
Then I invested the measly $6.00. =
> Well GUESS=20
> WHAT!!...within 7
days, I started =
> getting=20
> money in the mail! I was shocked! I figured it
face=3DArial=20
> size=3D2>would end soon, but the money just kept coming in. In my first =
> week, I=20
>
made about $25.00. By the end of =
> the second=20
> week I had made a total
of over =
> $1,000.00! In=20
> the third week I had over $10,000.00 and it's still
face=3DArial=20
> size=3D2>growing. This is now my fourth week and I have made a total of =
> just=20
>
over $42,000.00 and it still =
> coming in=20
> rapidly. It's certainly worth
size=3D2>$6.00, & 6=20
> stamps, I have spent more than that on the lottery!! Let me =
>
face=3DArial size=3D2>tell you how
size=3D2>this works and=20
> most importantly, why it works....Also, make sure you
face=3DArial size=3D2>print a copy of this article NOW, so you can get =
> the=20
> information off of

```
it as you need =
> it. I=20
> promise you that if you follow the directions exactly,
face=3DArial size=3D2>that you will start making more money than you =
> thought=20
> possible by
doing something so =
> easy!=20
> Suggestion: Read this entire message
size=3D2>carefully! (print it out or download it.) Follow the simple =
> directions=20
> and
watch the money come in! It's =
> easy. It's=20
> legal. And, your investment is
size=3D2>only $6.00=20
> (Plus postage) IMPORTANT:
This is =
> not a=20
> rip-off; it is not indecent; it is not illegal; and it is virtually=20
>
no risk - it really works!!!! If =
> all of the=20
> following instructions are
size=3D2>adhered to, you=20
> will
receive extraordinary =
> dividends. PLEASE=20
> NOTE: Please follow these
size=3D2>directions EXACTLY,=20
> and $50,000 or more can be yours in 20 to 60
face=3DArial=20
> size=3D2>days. This program remains successful because of the honesty =
> and=20
>
integrity of the participants. =
> Please=20
> continue its success by carefully
size=3D2>adhering to=20
> the instructions. You will now become part of the Mail
face=3DArial size=3D2>Order business. In this business your product is =
> not solid and=20
> tangible,
it's a service. You=20
>
are in the business of developing =
> Mailing=20
> Lists. Many large
corporations =
> are happy to=20
```

> pay big bucks for quality lists. However,
size=3D2>the=20
> money made from the
mailing lists =
> is secondary=20
> to the income which is made from people
size=3D2>like=20
> you and me asking to be included in that list. Here are the 4 easy=20
>
steps to success: STEP 1: Get 6 =
> separate=20
> pieces of paper and write the
size=3D2>following on=20
> each piece of paper "PLEASE PUT ME ON YOUR

> size=3D2>MAILING LIST." Now get 6 US $1.00 bills and place ONE inside=20
>
EACH of the 6 pieces of paper so =
> the bill=20
> will not be seen through the
size=3D2>envelope (to=20
> prevent thievery). Next, place one paper in each of the 6 =
>
face=3DArial size=3D2>envelopes and seal them. You should now have 6 =
> sealed=20
> envelopes,
each with a piece of =
> paper stating=20
> the above phrase, your name and
size=3D2>address, and=20
> a $1.00 bill. What you are doing is creating a service.

> face=3DArial size=3D2>THIS IS ABSOLUTELY LEGAL! You are requesting a =
> legitimate=20
>
service and you are paying for =
> it! Like most=20
> of us I was a little
skeptical =
> and a little=20
> worried about the legal aspects of it all. So I
face=3DArial=20
> size=3D2>checked it out with the U.S. Post Office (1-800-725-2161) and =
> they=20
>
confirmed that it is indeed =
> legal! Mail the 6=20
> envelopes to the following
size=3D2>addresses:

#1) =
> Samantha Blizniak,=20
> 7937 S. Newcastle, Burbank, IL 60459

size=3D2>#2)Katie Wiess, 14 White Tail Lane, Wallingford, CT=20
> 06492

#3)Traci Wood, 4224 =
> Carnwath Rd.,=20
> Tallahassee, FL 32303

>

#4)Milissa Crook, 3730 South 255th =
> Place, Kent,=20
> WA 98032

#5)James Buckner, =
> 11903 Coit RD.=20
> #1803 Dallas, TX 75251

>
#6)Bobbi Mullins, 31 Sunnydale Lane, Napoleon, OH =
> 43545

face=3DArial size=3D2>STEP 2: Now take the #1 name off the list that you =
> see above,=20
> move
the other names up (6 =
> becomes 5, 5=20
> becomes 4, etc...) and add YOUR
size=3D2>Name as=20
> number 6 on the list. STEP 3: Change anything you need to, =
>
face=3DArial size=3D2>but try to keep this article as close to original =
> as possible.=20
> Now, post
your amended article to =
> at least=20
> 200 newsgroups. (I think there are
size=3D2>close to=20
> 24,000 groups) All you need is 200, but remember, the more =
>
face=3DArial size=3D2>you post, the more money you make! This is =
> perfectly legal! If=20
> you
have any doubts, refer to =
> Title 18 Sec.=20
> 1302 & 1341 of the Postal
size=3D2>lottery laws.=20
> Keep a copy of these steps for yourself and, whenever
face=3DArial size=3D2>you need money, you can use it again, and again.=20
> PLEASE

REMEMBER that this program =
> remains=20
> successful because of the
honesty =
> &=20
> integrity of the participants & by their carefully adhering to=20
>
the directions. Look at it this =
> way. If you=20
> are of integrity, the program
size=3D2>will continue=20
> and the money that so many others have received will
face=3DArial=20
> size=3D2>come your way. NOTE: You may want to retain every name and=20
>
address sent to you, either on a =
> computer or=20
> hard copy and keep the
notes =
> people send you.=20
> This VERIFIES that you are truly providing a
face=3DArial=20
> size=3D2>service. (Also, it might be a good idea to wrap the $1 bill in =
> dark paper=20
>
to reduce the risk of mail =
> theft.) So, as=20
> each post is downloaded and the
size=3D2>directions=20
> carefully followed, six members will be reimbursed for their =
>
face=3DArial size=3D2>participation as a List Developer with one dollar =
> each. Your=20
> name will
move up the list =
> geometrically so=20
> that when your name reaches the #1
size=3D2>position=20
> you will be receiving thousands of dollars in CASH!!! What an =
>
face=3DArial size=3D2>opportunity for only $6.00 ($1.00 for each of the =
> first six=20
>
people listed above) Send it now, =
> add your=20
> own name to the list and
you're =
> in business!=20
>
---DIRECTIONS ----- =

```
>
face=3DArial size=3D2>FOR HOW TO POST TO NEWSGROUPS------------ =
>
face=3DArial size=3D2>Step 1) You do not need to re-type this entire =
> letter to do=20
> your own
posting. Simply put your =
> cursor at=20
> the beginning of this letter and drag
size=3D2>your=20
> cursor to the bottom of this document, and select 'copy' from the=20
>
edit menu. This will copy the =
> entire letter=20
> into the computer's memory.
Step =
> 2) Open a=20
> blank 'notepad' file and place your cursor at the top of =
>
face=3DArial size=3D2>the blank page. From the 'edit' menu select =
> 'paste'. This will=20
> paste a
copy of the letter into =
> notepad so=20
> that you can add your name to the
size=3D2>list.=20
>
Step 3) Save your new notepad =
> file as a .txt=20
> file. If you want to do your
size=3D2>postings in=20
> different settings, you'll always have this file to go back to. =
>
face=3DArial size=3D2>Step 4) Use Netscape or Internet explorer and try =
> searching=20
> for various
newsgroups (on-line =
> forums,=20
> message boards, chat sites, discussions.)
size=3D2>Step=20
> 5) Visit these message boards and post this article as a new =
>
face=3DArial size=3D2>message by highlighting the text of this letter =
> and selecting=20
> paste from
the edit menu. Fill in =
> the=20
> Subject, this will be the header that everyone
face=3DArial=20
> size=3D2>sees as they scroll through the list of postings in a =
```

> particular=20
> group,
click the post message =
> button. You're=20
> done with your first one!
size=3D2>Congratulations...THAT'S IT! All you have to do is jump to =
> different=20
>
newsgroups and post away, after =
> you get the=20
> hang of it, it will take
about 30 =
> seconds for=20
> each newsgroup! **REMEMBER, THE MORE
size=3D2>NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL =
>
face=3DArial size=3D2>MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** =
> That's=20
>
it! You will begin receiving =
> money from=20
> around the world within days!
You =
> may=20
> eventually want to rent a P.O.Box due to the large amount of =
>
face=3DArial size=3D2>mail you will receive. If you wish to stay =
> anonymous, you can=20
> invent a
name to use, as long as =
> the postman=20
> will deliver it. **JUST MAKE
SURE =
> ALL THE=20
> ADDRESSES ARE
CORRECT.** Now the =
> WHY part:=20
> Out of 200 postings, say I receive
size=3D2>only 5=20
> replies (a very low example). So then I made $5.00 with =
> my
face=3DArial size=3D2>name at #6 on the letter. Now, each of the 5 =
> persons who just=20
> sent me
$1.00 make the MINIMUM =
> 200 postings,=20
> each with my name at #5
and only =
> 5 persons=20
> respond to each of the original 5, that is another

face=3DArial=20
> size=3D2>$25.00 for me, now those 25 each make 200 MINIMUM posts with=20
>
my name at #4 and only 5 replies =
> each, I will=20
> bring in an additional
$125.00! =
> Now, those=20
> 125 persons turn around and post the MINIMUM
face=3DArial=20
> size=3D2>200 with my name at #3 and only receive 5 replies each, I will =
> make an=20
>
additional $626.00! OK, now here =
> is the fun=20
> part, each of those 625
persons =
> post a=20
> MINIMUM 200 letters with my name at #2 and they
face=3DArial=20
> size=3D2>each only receive 5 replies, that just made me $3,125.00!!!=20
>
Those 3,125 persons will all =
> deliver this=20
> message to 200 newsgroups
with my =
> name at #1=20
> and if still 5 persons per 200 newsgroups react I
face=3DArial=20
> size=3D2>will receive $15,625,00! With an original investment of only =
> $6.00!=20
>
AMAZING! When your name is no =
> longer on the=20
> list, you just take the
latest =
> posting in the=20
> newsgroups, and send out another $6.00 to names
face=3DArial=20
> size=3D2>on the list, putting your name at number 6 again. And start =
> posting=20
>
again. The thing to remember is: =
> do you=20
> realize that thousands of
people =
> all over the=20
> world are joining the internet and reading these
face=3DArial=20
> size=3D2>articles everyday?, JUST LIKE YOU are now!! So, can you=20

> afford
$6.00 and see if it really =
> works?? I=20
> think so... People have said, "what
size=3D2>if the=20
> plan is played out and no one sends you the money? So =
> what!
face=3DArial size=3D2>What are the chances of that happening when there =
> are tons of=20
> new
honest users and new honest =
> people who are=20
> joining the internet and
size=3D2>newsgroups everyday=20
> and are willing to give it a try? Estimates are at
face=3DArial=20
> size=3D2>20,000 to 50,000 new users, every day, with thousands of=20
> those
joining the actual =
> internet.Remember,=20
> play FAIRLY and HONESTLY
and this =
> will really=20
> work

>
> ------=_NextPart_000_0005_01C02598.3DD80D80--
>

3106. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 01:32:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CD4B91.5472F7FA@dvol.com>
Source record: 179849

>
> >Go for it
> >>
>
> OK; here's what we do. You come over and babysit; and correct term papers; and
> feed the dog; and visit my elderly aunts to check on them. In the mean time, I
> will , selfishly, operate a 48 hour contest at some other QTH. .

>
Been there, done it gazillions of times under very similar condx. No different than
going to LA or Chicago on biz for two days, the job gets done and nobody dies.
Including the dog. If you had any real interest in doing the 'test at somebody
else's qth you'd work it out.
>

>
> I wasn't referring to brutal in an admirable sense.

>
I was. It's the esssence of competition. You think maybe football players take
turns and say "'scuse me!" when they pile all over a runner already??
>

> What I mean is that Yuri
> breaks laws by stomping on others (malicious interference; grabbing frequencies
> already being used);

>
(a) Nobody guaranteed anybody a "clear freq". (b) Stomping has been SOP since the
first ham contest whenever that was. If ya can't hold yer freq get a bigger antenna
and/or radio or move up the band and ragchew. Like I sed, not for the thin-skinned,
inept or whiners.
>

> not properly ID'ing; and so on.

>
If he didn't ID the other stations wouldn't know his call and the q wouldn't get in
the logs. Lotsa contesters don't spit out their calls during every contact when
they're running and the FCC has known that since whenever. To the best of my
knowledge nobody has ever been spanked by the feds for this minor SOP infraction.
I'm sure you've done 60 in 55mph zones and never got busted. The FCC doesn't have
time to be anal, all they care abt is being able to identify the station when he
does send his call.
>>

> >Running EUs on 80 & 75 is even more fun. Except ya need real ears and
> >antennas and
> >75 will still be there when 10 is dead as a doornail.
> >>
>
> And, again: what this has to do with the 10M Contest is...(fill in blanks)

>
Has to with being a well-rounded op which is one thing working all bands in a 'test does for you vs. hanging out, for instance, only on 10m where most of the sigs are 10-20 over when the band is open and there's nobody home the rest of the time.
>

> >>
> >We'll see how ya do in the 2006 10m 'test.
>
> Why would I possibly want to do this often? It really is a very selfish thing
> for an adult to run away from other responsibilities many,many weekends in the
> fall and winter.

>
Basically a failed troll, but two weekends a year, 1.1% of a year. Ask yer buddies who do fishing and hunting weekends how they pull it off.
> >>

> >>
> >It's all in the skillset. Heh.
> >>
>
> Hardly. CT makes sense on CW because it can send the call.

>
The phone guys mouth and keyboard at the same time.
>
>On 10M phone, I can remember whether I worked a station rather easily so

> real-time duping won't be an issue, and if it is, I can use CT afterwards to
> remove dupes.
>
> What I am ASKING is how do you use CT to TRANSCRIBE a contest log, rather than
> having it grab times, and so on.

>
I can't answer yer question in any detail = dunno. The experienced CT gurus are accessible via the CT reflector. Dial up http://www.k1ea.com/ for the numerous CT resources.
>

> 73
> Chip n1IR
>

w3rv

3107. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 03:34:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CD683F.ADB9C2A6@dvol.com>
Source record: 179853

Jnrv1978 wrote:

> Hi this is Jon again, the guy who made the original post. This last comment
> seems to tell me that even using a long wire up high, with an antenna tuner is
> a better alternative than the B&W antenna. Am I understanding you correctly?

>
You understand 100%. Higher and longer beats lower and shorter every time.
>

> One reason I was looking at the B&W was that a friend was going to let me use
> his.

>
. . . If I had a B&W I'd cheerfully give it away, too.
>

> That is part of the reason I said I was trying to watch my pennies. I am
> on disability so money is scarce here.

>
Sorry to hear that, I wish you well.
>
The least expensive and biggest bang for the buck route by far is single-band
dipoles. Three insulators, some Home Depot #14 stranded THHN general-purpose wire,
some 8X coax, a PL-259 connector, some rope drapped thru some trees and bingo,
you're very efficiently on the air on any single band of your choice with a decent
swr for maybe $50 at most with all new "stuff", more like $30 if you shop around,
and for $5 per band if you really scrounge around. No tuner required at all.
>
>What about a long wire and the

> inexpensive tuner that MFJ has for a random length wire antenna?

>
I'm a bit suspicious about the ability of the little $50 MFJ-16010 guy to have
enough flexibility/tuning range required to cover the widely varying feedpoint
impedances you always run into with random end-fed wires. I could be wrong. Another
$30 for the 901B is probably a much better choice. I have both the much more
expensive 969 and the 941E tuners and both will match and load anything in sight
which even vaguely looks like it might radiate RF.
>
Keep in mind that the primary money tradeoff here is the cost of multiple
single-band dipoles without the need for any tuner and one all-band wire plus it's
tuner. The secondary tradeoff is the availability of antenna supports, hanging some
number of dipoles spaced apart so that interactions are not a problem vs. hanging
one wire, etc.

>
From the dollars and sense standpoint you'd probably come out ahead by picking two heavily-used bands for starters, say 20 & 40m and go with two dipoles IF you'll be happy with only two bands. If you want to run all nine of the ham bands which are below 30Mhz you'd be much better off with one duz-it-all wire plus it's $$ decent tuner. Plus you'd have to learn how to use the tuner. Which, when mastered, has it's own side benefits like amazing your friends who think that the planet spins around 50 ohm feedpoints.
>
Also keep in mind that if you go with a wire you should also string a counterpoise around the grounds of the estate.
>

> I do understand that most of you have said go di-pole, and I probably will
> include
> that also. No one has told me if these type of antennas are directional or omni
> directional. Thanks for your continuing input; I appreciate it all! Jon.

>
The classic dipole in isotropic space operated on it's fundamental freq has lobes broadside to the wires. If operated on other freqs the H-Plane lobes go every which way as shown in the ARRL Antenna Book. Random wires behave in a more or less similar manner. Fact is that no such thing as isotropic space or "classic dipoles" exist. Real-world pattern predictions for any backyard wire antennas are pointless exercises in futility because of the huge volume of uncontrollable variables. Ya takes the patterns ya gets, just put it up, get it on the air and enjoy HF ham radio.
>
w3rv

3108. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 04:08:57 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <t7fz5.27645$pu4.2660322@typhoon.ne.mediaone.net>
Source record: 179850

A spike through a fractal head would do....

3109. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 04:47:24 UTC
From: k4ia@aol.com
Message-ID: <20000924004724.03973.00000404@ng-cq1.aol.com>
Source record: 179851

I used a Gap Titan for about a year and *thought* it was great. Pretty weak on 80 but works the rest of the bands.

Then I got a 2 element Quagi from TGM in Canada and found out that I had made a big mistake with the GAP. The Quagi is not much bigger than a TV antenna, uses a cheap Radio Hovel TV rotor and works 20 - 6 mtrs. It is at least 2 S units better than the GAP has good directivity and is a much -- much better antenna for the money.

If you have to compromise, look at the Quagi and put up some kind of dipole / long wire for the lower bands. At this point in the sunspot cycle, all the action is on 20 and above anyway.
K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Check out http://www.ld.net/?bucksavers

3110. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 04:48:23 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CD8754.D247F099@att.net>
Source record: 179852

Sorry - the Butternut vertical DOES need radials. I operate mine over 60
radials buried about an inch. Butternut makes it clear that their
verticals do not work without a radial system.

And mine is "very efficient."

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Mike Donnelly wrote:
>
> Be careful about the GAP Titan DX if you really have 0 space. It requires a
> counterpoise system consisting of four rods that are 80 inches long. The ends
> are wired together, so you end up with nearly a 14 foot diagonal "box" shape
> at the base.
>
> That took it out of the running for me. Actually all of the pseudo-half-wave
> veticals need a counterpoise system at the base, although most a a little
> smaller than the GAP Titan. You might try a Butternut vertical and just forget
> about the need for radials. Not very efficient, but it needs no ground space.
>

3111. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 04:57:19 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <PQfz5.243057$i5.3289536@news1.frmt1.sfba.home.com>
Source record: 179854

If the ground is that rocky, the ground rod WILL BECOME FRACTALIZED!

Mike Camp ki7fq
El Cerrito, CA.

"Chuck O'Neal" <coneal@ultranet.com> wrote in message
news:t7fz5.27645$pu4.2660322@typhoon.ne.mediaone.net...
> A spike through a fractal head would do....
>
>

3112. new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 05:02:06 UTC
From: sideband@mindspring.com
Message-ID: <39CD8ACE.7E0F8DFF@mindspring.com>
Source record: 179855

I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also have the use of a MFJ 259 analyzer. The dipole is a metal bracket that allows 2 fiberglass whips to be attached to it, both with ends that allow them to be tuned. I am only able to put this antenna about 8 feet in the air as I live in a 'no antenna' apt. complex and currently have it hidden under the wooden balcony of the apartment above me. The SWR is currently about 1.8 at 50 MHz. If I tune the frequency either up or down on the analyzer the SWR goes up. Does this mean that the antenna is tuned as good as is 'possible' and the high SWR is because of the location or will more diligent work in tuning help? I think this is just because of the low height but I defer to those more knowledgeable. :-) Also, can you think of anything that will help to lower this SWR? Grounding something? Standing on my head in a bucket of water? :-) I have not been able to even hear anything on the radio yet let alone make any contacts and wonder if this is part of my problem. I know the location and height are not ideal but it is what I have to work with. I can get lower SWR in the apartment but every time I key the mic I come blasting through my pc speakers and stereo (even though it is turned off).

One last thing. If this is the antenna:

```
b
A ---------------------{}---------------------- A
b
```

Which directions are forward and back? A or B?
Does that make sense?

Thanks a lot
Joe
KB9WFK

3113. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 05:48:56 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <cBgz5.3945$6T.330840@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179856

Hey Joe,

This might be a tough problem. Given the data,
I would guess that the twin-whip idea has gone
as far as it can. The fact that the SWR goes up
when you vary the frequency in EITHER direction
indicates that the antenna is tuned about as well
as it can be.

It might be affected by metal (such as electrical
wires and structural elements) in the walls.

One thing to try would be a wire dipole in the same
location. If the wire dipole acted the same as the
whip antenna, then you have a problem.

It's interesting to notice that the rig gets into
the speakers and such. This indicates that
RF is being generated, and that the rig
is loading up OK. But... this is also going
to be a problem...

<sideband@mindspring.com> wrote in message
news:39CD8ACE.7E0F8DFF@mindspring.com...
> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I
also have
> the use of a MFJ
> 259 analyzer. The dipole is a metal bracket that allows 2
fiberglass
> whips to be
> attached to it, both with ends that allow them to be tuned
>
> One last thing. If this is the antenna:
> b
> A ----------------------{}----------------------- A
> b
>
>
> Which directions are forward and back? A or B?
> Does that make sense?
>
Direction "B" is the most often considered when
looking at directivity of dipoles. Little radiation
occurs off the ends of the dipole.

But remember that this is only true if the antenna
is at least a wavelength high and in the clear.

Good Luck!

Gary, WG7X
> Thanks a lot
> Joe
> KB9WFK
>
>
>

3114. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 06:01:02 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CD989E.C7F19E4D@oio.net>
Source record: 179858

Joe,
It sounds like the 1.8:1 is as low as it's going to get as the antenna is adjusted now. Changing the 'stinger' lengths my drop it down some, but I think you've got the lowest SWR your going to get. Changing height my have a 'good' affect, but maybe not.
I have no idea why your not hearing stations on 6 meters. I don't work 6, so can't say, but it seems like you should hear someone.
The reason your hearing your self in the stereo speakers is over-load. The speaker wires may be just the right/wrong length and acting as an antenna. You can try by-passing the speaker wires, use torroids, etc, on them but I don't think it's going to do much good. You've just got a ~lot~ of RF in the shack.(One of the problems with an indoor antenna.)
If I understand your question about the antenna, the major direction of radiation would be perpendicular to the elements of the antenna (B-B). Since the antenna isn't very high (1/2 wave above ground), it probably has more of an omni-directional pattern that's distorted in 'whatever' direction because of it being inside.
Good luck with it...
'Doc

3115. Re: Which antenna is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 06:08:39 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CD9A67.6B93A6B5@oio.net>
Source record: 179859

Janice Ogden wrote:
>
> Which is the better of the 3 for 11 meter citizens band radio?
>
> 1-Shakespeare ABS-1600 Base Antenna
> 2-Antron99 Omni-Directional Antenna
> 3-Solorcon I-MAX 2000

Janice,
I don't know if anyone can answer that question. It depends
on how and where each antenna is erected. What's around it, how
high it is, how well tuned, etc. There probably isn't all that
much difference...
'Doc

3116. Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 06:19:49 UTC
From: kb2nqt@juno.com
Message-ID: <39cd9aca.25097332@news.FCC.net>
Source record: 179860

I'm looking into verticals that work on an 8 story building? It'll be about 120" up and with a contast wind. I live in brooklyn, NY about 2 blocks from the water (NY Bay).
I see that the ants. are a big tall, so I'm worried about wind since most look like multiple sections. And if the antenna has radials, those would have to be at least 10 feet off the roof (Fire code). I have an old Shakespeare Big Stick CB antenna that I have been using on 10m and the top half on that bends a lot and quite often I see the top section doing a 90 degree bend

ANy help would be appreciated.

3117. Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 06:31:35 UTC
From: Janice Ogden <ogdenjm@gte.net>
Message-ID: <39CDA050.EE9EBFD7@gte.net>
Source record: 179861

Anyone wish to share their opinions on the best of the 3 antenna's that I have listed? I already have a Maco V-5000 on the roof, Im looking for

a good 2nd antenna for my other radio to put up in the tree at about 60'.

1-Shakespeare ABS-1600 Base Antenna
2-Antron99 Omni-Directional Antenna
3-Solorcon I-MAX 2000

3118. CHECK OUT THIS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-24 06:53:21 UTC
From: Serbear <chickenhawk@globalfreeway.com.au>
Message-ID: <8qk4smifs1@corolla.OntheNet.com.au>
Source record: 179857

Hello to you all,
I just got this sent to me, so am just passing it around.
Bev
Subject: Re: EXTRAORDINARY OPPORTUNITY//////

PLEASE SEND ME WHAT YOU HAVE BUT WOULD YOU PLEASE LOOK AT THIS IT IS FREE
AND
I'VE MADE CLOSE TO $10,000.00 AND I JUST SIGNED UP ON WED. NIGHT SO PLEASE
LOOK AT IT
LUCY

Hi,
How would you like to make some money immediately? Check this site out- :
http://www.ineedthat.tv/signup.php3?r=AAKLEZ&MemberID=NEW

I guess there's a glitch in the system that the company knows about, but
they
haven't fixed as yet. Here's how it works. Sign up, then go back in and
login. After all this click on HOME. On the right you will see where it says
"Tell me more about keywords" click that. Scroll down and click NEXT. Scroll
down on the bottomhalf and click the white and red logo box. Then a small
box
should pop up with your user name in it. Whiteout where it says enter
keyword
and type GOLF. Click go. This is where the glitch is. Basically you can keep
getting paid for this keyword. I was told to hit the backspace on my
keyboard. You don't have to close the wimndow, just keep going back to the
main screen and click the red and white logo box again. It will renew the
smaller screen again, and you can type GOLF as the keyword again. Try it
about 10 times, then go back to the main page and check your stats. It
should
show how many times you did this and you get paid $.25 for each time.

This is a letter my upline got from her cousin.
Hey everyone,
Guess What?? My friends that told me about the Ineedthat tv said he called
the CEO!!! He said that the company knows there's a glitch and they are
fixing it, but they don't really care, and they said they send the checks
out
on the 15th. They said it was their lawyers fault because they knew the page
wasn't ready but the lawyers made them put it up because they told all the
web companies that it would be up by a certain date. So maybe if we all hold
our breath together. OH! OH! he said that a lot of people knew about this
and
there were some people who didn't even get referrals, they just racked like

$10,000.00 under their own names!
Anyways,
Talk to you all later,
Danielle.

You may want to hurry up and sign up before they fix the glitch. Tell all your friends.

Jassodra.

3119. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <PeQz5.10$ai4.35725@news.ntplx.net>
Source record: 179469

K1BQT <k1bqt@aol.com> wrote:

> If anybody did spend much time picturing that, I sure as hell don't want to go
> to lunch with them! I trust you didn't, so I hope I'm still on for a lobster.

So, when it this alleged lobster gonna' happen? Prices are still pretty low at Tinkers.

I don't care who buys; either way, I will be eating lobster.

73,
Ed Hare, W1RFI

3120. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <jjQz5.11$ai4.35974@news.ntplx.net>
Source record: 179470

Fractenna <fractenna@aol.com> wrote:

> In contesting (or contesting-like condx) most callers listen for a minute
or
> more before they call and they--like me --are attracted by interesting and
> efficient operating. That makes up for a few dB difference in signals!

As one who is in the squirt gun category in contests (QRP at <20 dBm ERP in the CW SS), I can attest to this. If someone appears to be a sharp op, I will wait out the pileup until I get through; if he or she is efficient, there will be an opening sooner rather than later. If the op is fumbling around at all, I move on to the next op, hoping to maybe come back later. The first one will get me more often than the second one.

Now, speaking of contests, Chip, you were looking for a challenge. Would you care to take me on for points per watt in the 2000 ARRL CW Sweepstakes? I won't call you a chicken if you prefer a different type of operating and don't accept. :-)

73,
Ed Hare, W1RFI

3121. antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <xjQz5.87693$i5.3136799@news1.rdc2.on.home.com>
Source record: 179471

I want to put up a wire 20 m dipole for qrp cw. I have a 2 story house.
Which would be the better of these 2 options:
1) a dipole strung from the edge of the roof (16 ft high) to a 16 ft pole at
the edge of the property or
1) an inverted v strung across the top of the house supported in the center
at 8 ft above the roof and sloping down at each end to a few inches above
the roof.

In the case of the inverted V, the coax feed line would be about 60 feet ,
and with the first option, the feed line would be about 90 feet. (Should I
be concerned about this?)
Tnx

Wayne Jones
ve3 gqx

3122. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <3lQz5.12$ai4.36208@news.ntplx.net>
Source record: 179472

Fractenna <fractenna@aol.com> wrote:

> >Let's discuss something much more important. How many girls
> >did you kiss in high school? :-)

> Are 'dupes' allowed?

Only if they don't appear in the official record. Otherwise, the one being duped generally disqualifies the operator. :-)

73,
Ed Hare, W1RFI

3123. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000925184137.07830.00001025@ng-da1.aol.com>
Source record: 179473

>I, too, will come out of the closet. :-)<

Me too, Ed! I once supervised a University AV Center where we fixed all kinds of broken TV monitors and receivers (Remember all the SAMS PhotoFacts and crappy Sencore test equipment?). Then I was a TV systems designer and also built editing systems and classroom dispaly systems. Later, I was a TV Writer/Producer and a (yuck) Video Editor. I've even worked as "Talent" (using the term very loosely). Near the end, just before I hit rock bottom, I did Distance Learning Centers--peddling my wares to....kids.

I'm better now, but occassionally, when I watch the news at bedtime, I sneak into the remote menu and change a setting or two----just to see if I've still got it.

What's most distressing, though, is that my kid has a IMAC ITV and a DVD camera. I'm afraid, like Fetal Alcohol Syndrome, these things may pass from generation to generation. "Promise me son, not to do what I've done!"

73

Rick K1BQT

3124. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39CFBEB7.4C04@pacbell.net>
Source record: 179474

Richard Clark wrote:

(snip)

> To those who cannot find peers in this forum: you are probably in the
> wrong place, serf.
>
> To those Wild Eyed Missionaries who proclaim their calling takes them
> to foreign lands (our back yard) where they have no peers - yeah. We
> have a College of Cardinals. Missionaries sit below the salt.
>
> 73's
> Orlando Furioso, KB7QHC ;->

Hi, Orlando,
glad to see you on the newsgroup. I hope you're not
still sore about losing Angelica to that Moorish fellow, Medoro.
A medieval hero who goes crazy over the love of a woman, and kills
bears with his bare hands to prove it, is just what this newsgroup
needs. It's got everything else.

73

Tom Donaly KA6RUH

3125. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CFD8A7.783B@wt.net>
Source record: 179475

Wayne Jones wrote:
>
> I want to put up a wire 20 m dipole for qrp cw. I have a 2 story house.
> Which would be the better of these 2 options:
> 1) a dipole strung from the edge of the roof (16 ft high) to a 16 ft pole at
> the edge of the property

Would work ok...
or
> 1) an inverted v strung across the top of the house supported in the center
> at 8 ft above the roof and sloping down at each end to a few inches above
> the roof.
>
Maybe better if this would be higher than 16 ft. Just watch out for
wiring etc under the roof. Can couple with antennas and make tuning
tricky. Being the apex would be 8 ft above the roof I don't think you
would have problems. I think I like this 2nd one better. Should be over
20 ft up. Better than 16 ft..You might look into lightning protection
for that antenna. Dipoles generally don't get hit very often, but you
don't want to take chances. I'd either connect the coax to ground
outside during storms, or use a suppressor of some type, to at least
keep from burning the shack down in case of a strike.

> In the case of the inverted V, the coax feed line would be about 60 feet ,
> and with the first option, the feed line would be about 90 feet. (Should I
> be concerned about this?)
No , not really...Not on 20m. The loss either way is low. MK

--
http://web.wt.net/~nm5k

3126. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CFD969.60A7@wt.net>
Source record: 179476

David J. Windisch wrote:
>
> DAEAMMMMM! That's ironic! Apologies all around for an unknown cause.
>
> K3BHJ

BTW, you can delete all those extra posts. Just pull up each one and cancel the message and they will be gone for all future subscribers. Not sure if you knew you could do that...I delete posts quite a bit. I'll delete this one in 24 hours....g MK
--
http://web.wt.net/~nm5k

3127. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CFDC3A.121E35CF@eznec.com>
Source record: 179477

Vertical sweep tube shot, and yoke got twisted 45 degrees.

Sure glad I got out of that business before anybody found out how little I know about it!

Actually, I found TV repair to be much more challenging than military heavy ground radar repair, which I've also done. The TV circuitry was extremely obtuse, with every trick imaginable to take a nickel out of the production cost. And the components were crappy. You'll probably never see an open circuited capacitor in any kind of quality equipment, but the ones they used in TVs commonly had an end cap come loose internally. One episode I remember is a problem with the sync. It turned out to be caused by a tired video output tube. The designer needed 25 or so volts of DC to bias something in the sync circuit, and got it from the video output stage cathode resistor. The video output tube's current was off -- not enough to bother the video, but enough to goof up the sync bias. Another one I saw with me own eyes was a car radio which wouldn't work due to the car battery being connected backward! Yes, the car started, and ran. The gauges didn't work. That was back in the generator days -- the car was a Corvair, mid-60's. I also recently came across someone else who saw the same thing.

Anyway, my hat's off to those of you who make your living this way. It isn't easy, and the pay's not that good. You have my respect.

Roy Lewallen, W7EL

"Ed Hare, W1RFI" wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
>
> > I'm a former TV repairman myself. Dunno how where former radio repairmen
> > fit on the social status, but Howard Vollum, cofounder of Tektronix, was
> > also a former radio repairman. I'm sure it wouldn't take much looking to
> > find a long list of well respected, even prominent scientists and
> > engineers who once kept food on the table this way.
>
> Well, I am not a prominent scientist, but now that someone as respected as
> you, Roy, has removed the stigma from being a former TV repairman, I, too,
> will come out of the closet. :-)
>
> Okay, now, former TV repairman to TV repairman, let's test how much you
> remember. A customer brings in a TV set for repair. You turn it on and
> there is a diagonal line from the upper left corner of the screen to the
> lower right corner of the screen. What is the defect?
>

> 73,
> Ed Hare, W1RFI

3128. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39dcdfb9.286846954@news.seanet.com>
Source record: 179478

On Mon, 25 Sep 2000 14:08:07 -0700, Donaly <dtdonaly@pacbell.net>
wrote:

>Richard Clark wrote:
>
>(snip)
>
>> To those who cannot find peers in this forum: you are probably in the
>> wrong place, serf.
>>
>> To those Wild Eyed Missionaries who proclaim their calling takes them
>> to foreign lands (our back yard) where they have no peers - yeah. We
>> have a College of Cardinals. Missionaries sit below the salt.
>>
>> 73's
>> Orlando Furioso, KB7QHC ;->
>
>Hi, Orlando,
> glad to see you on the newsgroup. I hope you're not
>still sore about losing Angelica to that Moorish fellow, Medoro.
>A medieval hero who goes crazy over the love of a woman, and kills
>bears with his bare hands to prove it, is just what this newsgroup
>needs. It's got everything else.
>
>73
>
>Tom Donaly KA6RUH

Hi Tom,

The discussion of the classics would probably come to a more
satisfying conclusion than having to live them by mutated proxy within
this group.

My choice for a better depiction of Roland (Orlando) would be "La
Chanson de Roland." (It is consistent with the sacrifices made.)

73's
Richard Clark, KB7QHC paladin to the court of Charlemagne ;->

3129. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <kgmoq8.l53.ln@mail.specsol.com>
Source record: 179479

K1BQT <k1bqt@aol.com> wrote:
>>I, too, will come out of the closet. :-)<

> Me too, Ed!

Well, since we are all confessing...

I did TV repair during high school and aircraft radio repair during college.

FWIW, when we were hiring engineers, we looked more favorably on someone
with a C to B average that worked as a technician of some sort than we did
on someone with As and no tech experience.

All the best engineers I ever worked with had tech experience.

Jim Pennino

3130. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cfde5b.50195780@news.akorn.net>
Source record: 179480

On Mon, 25 Sep 2000 18:09:06 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>Okay, now, former TV repairman to TV repairman, let's test how much you
>remember. A customer brings in a TV set for repair. You turn it on and
>there is a diagonal line from the upper left corner of the screen to the
>lower right corner of the screen. What is the defect?
>
>73,
>Ed Hare, W1RFI

The TV set has a defective deflection yoke, or circuit problem,
allowing the horizontal and vertical deflection windings to be driven
with the same sweep signal.

Of course from a do-it-yourselfer, you could find no vertical sweep
and a twisted yoke.

Now for an amateur related question.

What TV sweep tube was the most powerful sweep tube ever used (hint,
Admiral TV's only), capable of over 200 watts output on CW with
excellent tube life?

73 Tom

3131. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cfe0f8.50865127@news.akorn.net>
Source record: 179481

On Mon, 25 Sep 2000 18:26:52 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>Fractenna <fractenna@aol.com> wrote:
>
>> >Let's discuss something much more important. How many girls
>> >did you kiss in high school? :-)
>
>> Are 'dupes' allowed?
>
>Only if they don't appear in the official record. Otherwise, the one being
>duped generally disqualifies the operator. :-)
>
>73,
>Ed Hare, W1RFI

Rumor has it Chip duped his wife into marrying him. Multiple kisses on
a girl who was duped obviously shouldn't count.

73 Tom

3132. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cfe167.50975500@news.akorn.net>
Source record: 179482

On Mon, 25 Sep 2000 16:34:28 -0500, sideband@mindspring.com wrote:

>Ok. Yes it is a MFJ 9406 6-meter ssb radio. The static changes every once
>in a while so I don't think the radio is dead. :-)
>Just don't hear anybody talking or even CW. Someone give a shout when the
>band opens up would ya? I'll keep trying but if it opens and I still don't
>hear anything..... well then I guess I'll try a different antenna position
>and see if that is the problem.

Where are you located??

73 Tom

3133. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CFE332.428622FB@eznec.com>
Source record: 179483

I'm very, very sorry to hear this.

For several years, I've watched one person after another appear on the newsgroup and try to engage Chip in a meaningful technical discussion. And one by one, they fall under his onslaught of insults, arrogance, pedantry, rudeness, and childish behavior. No one has succeeded. No one will succeed. For a long, long, time, I bit my tongue hard, and tried really, really, hard to treat Chip the same way as I try to treat everyone else. I bent over backward to not say anything insulting or personal. My comments were directed solely to what was said, not who said it. I'm far from perfect, so I didn't always succeed, but I think I did pretty well. But I finally lost it after asking a series of honest and objective questions, and getting the usual rude smart-ass one-liners and insults in response. I've given up on Chip -- it's not possible to hold an intelligent conversation with him, at least not on this newsgroup. I've come to dislike the person himself, not just what he says. This isn't just because of his rude responses to me, but also because of what he's done to everyone else he encounters here.

The most recent active arrivals here have been Ed and Steve. Ed tried really hard to be objective and factual -- and did an excellent job of it --, and engage in a meaningful dialog. He kept his cool in the face of the onslaught. But I sense he's pretty much given up on Chip like we all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)

Steve set an example we should all follow, but frankly I don't think I'm capable of maintaining as high a standard of conduct as Steve has shown. He deserves all our thanks and respect. He's a true professional and a true gentleman. So it's particularly hard to see him go.

So what does his going have to do with Chip? Steve hasn't said why he left, and I haven't contacted him by email -- yet. I very strongly suspect, based on several years of observation, that Chip is somehow part of the reason for his leaving. If I'm right, we can and should blame Chip for depriving us of someone very knowledgeable, objective, and willing to share information. We could have learned a lot from him. If I'm wrong, well, then, the rest of what I have to say here is still relevant.

How much longer can we put up with this destructive behavior from one spoiled bully? How can we make it stop? The obvious solution, and one I'm sure would be effective, is to simply never respond to any post Chip makes. But this has been suggested several times, and some of us just don't seem to be capable of doing it. Also, new folks keep dropping in and naively trying to engage Chip in a meaningful dialog. It's hard to watch them get discouraged and disgusted one by one, as the rest of us

have, without lending support.

We can't keep him from posting, and that's how it should be -- this is a public newsgroup. So the only way to cure the problem lies in the way we respond. Any suggestions?

Roy Lewallen, W7EL

VE9SRB wrote:
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20000924221311.14996.00000641@ng-cb1.aol.com...
> >
> > Nathan Cohen, Ph.D.
>
> For reasons that I cannot discuss on this NG, this will be my last and final
> post.
>
> Private correspondence welcome.
>
> 73,
> Steve, VE9SRB

3134. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39cfe53d.163370839@news.azstarnet.com>
Source record: 179484

On 25 Sep 2000 20:41:07 GMT, lscotth@aol.com (LScottH) wrote:

>I'm putting up an old Mosley TA-33. My question is: Can I substitue a 1:1 balun
>for the coax choke? Will the balun keep RF off the coax as well as the choke
>does?

In that function of the coiled coax is to impede common-mode current, it is a
balun. A suitable "W2DU" ferrite balun will function just as well, if not
better.

Wes Stewart, N7WS
>
>Thanks and 73,
>Scott - ka0daq
>

3135. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFD56F.A5973F1C@dvol.com>
Source record: 179485

Yuri Blanarovich wrote:

> >
> >Speak from experience please. The highest rate I know of is about 350Q/hr
> >from
> >HC5A. I am very interested--really--in others.
> >
> >73
> >Chip N1IR
> >
> >
>
> He don't now two much!
>
> He is just getting out of dipers. Congratulations!
> One day he might grow up to be contester. Rates on phone over 400/hr were done
> way back in late 70ties, 9/min is quite normal.
> This is antenna NG, not a contest NG.
> Eat chili and fade away! Making fool of yourself!
>
> bada BYm

>
I'd just love to see him put one of those FQYs on 20 on Saturday morning in the CQ WW . . The only "runs" he'd generate would be in his pants.
>
w3rv

3136. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CFED7E.A0AEA29F@mindspring.com>
Source record: 179486

Tom W8JI wrote:

> On Mon, 25 Sep 2000 16:34:28 -0500, sideband@mindspring.com wrote:
>
> >Ok. Yes it is a MFJ 9406 6-meter ssb radio. The static changes every once
> >in a while so I don't think the radio is dead. :-)
> >Just don't hear anybody talking or even CW. Someone give a shout when the
> >band opens up would ya? I'll keep trying but if it opens and I still don't
> >hear anything..... well then I guess I'll try a different antenna position
> >and see if that is the problem.
>
> Where are you located??
>
> 73 Tom

Carol Stream, IL A chicago suburb.

3137. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CFF0D6.C8FE13DF@eznec.com>
Source record: 179487

As you say, you can get an adequately high common mode impedance from either a "W2DU" balun or a coil of feedline. Each has its advantages and disadvantages.

The W2DU balun can be made very wideband, to easily cover all the HF bands. The coiled coax choke will give quite a high impedance over only about three bands. Of course, coiled coax chokes for different parts of the spectrum can be put in series.

The W2DU balun is pretty forgiving, as long as you use a ferrite that's suitable for the job. The coiled coax balun has to have the right number of turns and/or diameter. Some combinations are given in the ARRL Handbook.

The W2DU balun can get pretty hot if you're running very high power, again depending on the ferrite choice. The coax choke balun doesn't.

The W2DU balun doesn't really take up much more space than the coax itself. A coax choke balun has to be kept reasonably clear of large conductors or the ground.

The W2DU balun can be pretty expensive. The coax choke balun is cheap.

**Note: The comments about coiled coax choke baluns apply to ones made in the form of a relatively large, flat coil like a coil of rope. I've measured a number of these, and those measurements are the source of the ARRL Handbook recommendations. Others have wound coax into a solenoid on some sort of form. These will work, too, but I haven't measured any and don't know anything about their effective bandwidths. Like the flat coils, these would have to be wound with a particular number of turns and diameter to be effective over a particular frequency range. Some people seem to think that a solenoid like this will act like an ideal inductor, with its impedance increasing monotonically with frequency. It doesn't. Like the flat coil, it has a self resonance, and presents a high impedance only over a range of frequencies approximately centered on that resonance.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> On 25 Sep 2000 20:41:07 GMT, lscotth@aol.com (LScottH) wrote:
>
> >I'm putting up an old Mosley TA-33. My question is: Can I substitue a 1:1 balun
> >for the coax choke? Will the balun keep RF off the coax as well as the choke
> >does?
>

> In that function of the coiled coax is to impede common-mode current, it is a
> balun. A suitable "W2DU" ferrite balun will function just as well, if not
> better.
>
> Wes Stewart, N7WS
> >
> >Thanks and 73,
> >Scott - ka0daq
> >

3138. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CFEE25.FDE41059@mindspring.com>
Source record: 179488

Thanks. I'll definitely do that.

Bill Aycock wrote:

> Sideband- in another post, you asked to be informed if the band opens-
> there are two mailing lists (at least) that are dedicated to 6M. People
> frequently post about openings, and, of course, there is a lot of other
> info there.
>
> The lists are both called "50mhz",and both use the Majordomo system.
>
> sent a post to :
> Majordomo@qth.net
> with the body saying subscribe 50mhz
>
> send another post to:
> majordomo@6mt.com
> with the body saying subscribe 50mhz
>
> Both will pick up your address from the message, send you a request for
> confirmation, and then a "welcome" post.
>
> Try it, you'll like it
>
> Good luck- Bill

--
The preceding may or may not have been authored by myself but I offer it to
you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned
that I refuse to use a
spell checker and don't take criticism well.

3139. Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Joe Schlatter <joe@schlatter.org>
Message-ID: <39cff1ac@news.planetc.com>
Source record: 179489

I was looking at the Hustler 40 meter mobile antenna in catalog last night and have a question.

The catalog does not show a Hustler mobile antenna assembled nor does it tell anything about what parts one needs to purchase to make a complete antenna.

As I figure it, I need:

-- bumper mount
-- spring
-- mast
-- resonator

Appears that the spring screws into the bumper mount, mast screws into the spring, and the resonator screws into the mast. Change bands by changing resonators. The resonator seems to have a telescoping end that is used to adjust for operating freq. Is this correct?

I travel a lot and am looking at purchasing a Hustler 40-m mobile and operate mobile plus run coax from motel room to car and operate from motel room.
--

Regards,
Joe Schlatter
joeNOSPAM@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
Amateur Radio Extra Class call sign W4HH

3140. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Arthur Unwin <aunwin@fgi.net>
Message-ID: <39CFF75D.3E3B080A@fgi.net>
Source record: 179490

If you engage him in a post then you get what you ask for.
If you refute what he says then you assign a value to what he says
If you debate him on a technical issue then you include him
as one of your peers
It is up to individual posters to determine if an association
with him will be of value
A person is also judged by the company he keeps
With the above in mind, why on earth do so many
participate in his posts?
Look at the specific individuals who consistently
respond to Chip, they all have a similar pattern in
their communications(the quest for the last word)
This should tell you something if you are not like minded
I too am sorry to see Steve leave but most posts now
revolve around Chip and each must determine what
value to assign to those particular discussions and that
which remains
Art Unwin KB9MZ

Roy Lewallen wrote:

> I'm very, very sorry to hear this.
>
> For several years, I've watched one person after another appear on the
> newsgroup and try to engage Chip in a meaningful technical discussion.
> And one by one, they fall under his onslaught of insults, arrogance,
> pedantry, rudeness, and childish behavior. No one has succeeded. No one
> will succeed. For a long, long, time, I bit my tongue hard, and tried
> really, really, hard to treat Chip the same way as I try to treat
> everyone else. I bent over backward to not say anything insulting or
> personal. My comments were directed solely to what was said, not who
> said it. I'm far from perfect, so I didn't always succeed, but I think I
> did pretty well. But I finally lost it after asking a series of honest
> and objective questions, and getting the usual rude smart-ass one-liners
> and insults in response. I've given up on Chip -- it's not possible to
> hold an intelligent conversation with him, at least not on this
> newsgroup. I've come to dislike the person himself, not just what he
> says. This isn't just because of his rude responses to me, but also
> because of what he's done to everyone else he encounters here.
>
> The most recent active arrivals here have been Ed and Steve. Ed tried
> really hard to be objective and factual -- and did an excellent job of
> it --, and engage in a meaningful dialog. He kept his cool in the face
> of the onslaught. But I sense he's pretty much given up on Chip like we
> all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)

>
> Steve set an example we should all follow, but frankly I don't think I'm
> capable of maintaining as high a standard of conduct as Steve has shown.
> He deserves all our thanks and respect. He's a true professional and a
> true gentleman. So it's particularly hard to see him go.
>
> So what does his going have to do with Chip? Steve hasn't said why he
> left, and I haven't contacted him by email -- yet. I very strongly
> suspect, based on several years of observation, that Chip is somehow
> part of the reason for his leaving. If I'm right, we can and should
> blame Chip for depriving us of someone very knowledgeable, objective,
> and willing to share information. We could have learned a lot from him.
> If I'm wrong, well, then, the rest of what I have to say here is still
> relevant.
>
> How much longer can we put up with this destructive behavior from one
> spoiled bully? How can we make it stop? The obvious solution, and one
> I'm sure would be effective, is to simply never respond to any post Chip
> makes. But this has been suggested several times, and some of us just
> don't seem to be capable of doing it. Also, new folks keep dropping in
> and naively trying to engage Chip in a meaningful dialog. It's hard to
> watch them get discouraged and disgusted one by one, as the rest of us
> have, without lending support.
>
> We can't keep him from posting, and that's how it should be -- this is a
> public newsgroup. So the only way to cure the problem lies in the way we
> respond. Any suggestions?
>
> Roy Lewallen, W7EL
>
> VE9SRB wrote:
> >
> > "Fractenna" <fractenna@aol.com> wrote in message
> > news:20000924221311.14996.00000641@ng-cb1.aol.com...
> > >
> > > Nathan Cohen, Ph.D.
> >
> > For reasons that I cannot discuss on this NG, this will be my last and final
> > post.
> >
> > Private correspondence welcome.
> >
> > 73,
> > Steve, VE9SRB

3141. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <8qost0gnp1@slb3.atl.mindspring.net>
Source record: 179491

I bet the hackers stole his request to join.

Hope this helps.

Tom - N1MM

Fractenna <fractenna@aol.com> wrote in message
news:20000925084243.25741.00000791@ng-mg1.aol.com...
> >
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000924213645.14996.00000639@ng-cb1.aol.com...
> >> >After 2 - 3 weeks of "membership pending" status, I gave up on
> >> >that.
> >>
> >> I, as moderator have NEVER RECEIVED a request from Steve Best to join
the
> >> fractal antenna reflector.
> >>
> >> This is simply a prevarication.
> >>
> >> Why Best would lie on this is beyond me.Perthaps he can best explain.
> >>
> >> Nathan Cohen, Ph.D.
> >>
> >>
> >
> >In August 2000 I went to the egroups site and tried to join the fractal
> >reflector. For at least two weeks, each time I visited the site my
> >membership status was "pending" waiting for approval of the moderator.
This
> >is no lie. Perhaps Chip should check with egroups to make sure that he
> >receives all requests to join.
> >
> >73,
> >Steve VE9SRB
>
>
> I received no such request. I already told you this.
>
> And what is stopping you from trying?
>
> NC

3142. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CFF6DE.4866A5C4@hiwaay.net>
Source record: 179492

Roy- You are so right. Chip has the manners of a pit Bull. He has caused trouble for many, by his off-NG destructive posts. At least one regular here has been hurt, financially, by his dirty tactics, and one has had his ISP service cut because of Chips multi-named postings in complaint.

I fear that Chip has done the Steve presence here the same kind of dis-service. He is capable of doing almost anything to anyone who is clearly better qualified that he. We know he lies to and about people, and mis-quotes freely. It looks like anyone with a public presense outside the NG has to cover their ass because of his uncivil behavior. I only hope he does not try to get even with Ed, in a similar fashion.

I dont know what we can do to or about him. He is clearly uncivilized and boorish, as well as vicious.

I hope this helps.

Bill-W4BSG

Roy Lewallen wrote:
>
> I'm very, very sorry to hear this.
>
> For several years, I've watched one person after another appear on the
> newsgroup and try to engage Chip in a meaningful technical discussion.
> And one by one, they fall under his onslaught of insults, arrogance,
> pedantry, rudeness, and childish behavior. No one has succeeded. No one
> will succeed. For a long, long, time, I bit my tongue hard, and tried
> really, really, hard to treat Chip the same way as I try to treat
> everyone else. I bent over backward to not say anything insulting or
> personal. My comments were directed solely to what was said, not who
> said it. I'm far from perfect, so I didn't always succeed, but I think I
> did pretty well. But I finally lost it after asking a series of honest
> and objective questions, and getting the usual rude smart-ass one-liners
> and insults in response. I've given up on Chip -- it's not possible to
> hold an intelligent conversation with him, at least not on this
> newsgroup. I've come to dislike the person himself, not just what he
> says. This isn't just because of his rude responses to me, but also
> because of what he's done to everyone else he encounters here.
>
> The most recent active arrivals here have been Ed and Steve. Ed tried
> really hard to be objective and factual -- and did an excellent job of
> it --, and engage in a meaningful dialog. He kept his cool in the face
> of the onslaught. But I sense he's pretty much given up on Chip like we
> all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
>

> Steve set an example we should all follow, but frankly I don't think I'm
> capable of maintaining as high a standard of conduct as Steve has shown.
> He deserves all our thanks and respect. He's a true professional and a
> true gentleman. So it's particularly hard to see him go.
>
> So what does his going have to do with Chip? Steve hasn't said why he
> left, and I haven't contacted him by email -- yet. I very strongly
> suspect, based on several years of observation, that Chip is somehow
> part of the reason for his leaving. If I'm right, we can and should
> blame Chip for depriving us of someone very knowledgeable, objective,
> and willing to share information. We could have learned a lot from him.
> If I'm wrong, well, then, the rest of what I have to say here is still
> relevant.
>
> How much longer can we put up with this destructive behavior from one
> spoiled bully? How can we make it stop? The obvious solution, and one
> I'm sure would be effective, is to simply never respond to any post Chip
> makes. But this has been suggested several times, and some of us just
> don't seem to be capable of doing it. Also, new folks keep dropping in
> and naively trying to engage Chip in a meaningful dialog. It's hard to
> watch them get discouraged and disgusted one by one, as the rest of us
> have, without lending support.
>
> We can't keep him from posting, and that's how it should be -- this is a
> public newsgroup. So the only way to cure the problem lies in the way we
> respond. Any suggestions?
>
> Roy Lewallen, W7EL
>
> VE9SRB wrote:
> >
> > "Fractenna" <fractenna@aol.com> wrote in message
> > news:20000924221311.14996.00000641@ng-cb1.aol.com...
> > >
> > > Nathan Cohen, Ph.D.
> >
> > For reasons that I cannot discuss on this NG, this will be my last and final
> > post.
> >
> > Private correspondence welcome.
> >
> > 73,
> > Steve, VE9SRB

3143. Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <39CFFF7E.7BFEFB55@aztek-eng.com>
Source record: 179493

One persistent JERK has caused several people to leave the group in disgust. This behavior continues and the JERK does not appear to have a conscience or any self decency. This really upsets me as I enjoy learning from several of the experts provided that I can weed through the nonsense.

Has the group ever considered going to a moderated group with a reasonable posting policy? I know that many folks don't like the idea of a moderated group but virtually everyone dislikes the constant behavior of this one person who can't possibly have so much free time and a job. This would fix most of the problems and instantly reduce the number of posts by 1/6th without loss of any content. Remember that this one bad apple is responsible for 1/6th of the posts. I don't know who would want the unenviable job of moderator. Am I way off base here or do some folks actually enjoy this infantile behavior?

Larry, W0QE

3144. Alinco two-meter handhelds for sale.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Aaron Wells <wellsa@conceptsnet.com>
Message-ID: <LbTz5.2883$kg6.309772@news.uswest.net>
Source record: 179494
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homeb

I have two handheld radios for sale. Both are Alinco DJ-195 handhelds and transmit on amateur radio two-meter frequencies, which is 144 to 148 MHz. They transmit at 5 watts, and have worked on simplex at a little over five miles. Using a repeater you gain substantially more range. Both come with speaker microphones as well as surveillance microphones. They come with two wall chargers, one car charger and a suction cup antenna mount for use inside your car. Keep in mind you need an amateur radio license to transmit on two-meter frequencies. I'll sell the whole package for $300 plus shipping.

You can view the radio and specs at:

http://www.alinco.com/Products/DJ-195

Also have a Radio Shack scanner for sale. Works with trunked systems, and scans from 29 MHz to 900Mhz. Cellular frequencies are blocked. Will sell it, plus two rechargable battery packs, for $100 plus shipping.

If you're interested, please e-mail me at wellsa@conceptsnet.com or call (206) 222-7521.

Thanks.

--
Aaron T. Wells, CMI
Principal Consultant
Northwest Profiles
1122 E. Pike St., #1289
Seattle, WA 98122-3934
(877) 866-7915 Toll-free
(206) 222-7521 Pager

3145. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qovdo$6h5$1@iac5.navix.net>
Source record: 179495

ROTFLMAO!

"Fractenna" <fractenna@aol.com> wrote in message
news:20000925210544.26580.00002052@ng-ch1.aol.com...
> >Chip has an established history of making "less than straight
> >forward" statements.
>
> Could you kindly quote some examples for us?
>
> 73
> Chip N1IR

3146. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9pvoq8.vuc.ln@mail.specsol.com>
Source record: 179496

Roy Lewallen <w7el@eznec.com> wrote:

<snip>

> We can't keep him from posting, and that's how it should be -- this is a
> public newsgroup. So the only way to cure the problem lies in the way we
> respond. Any suggestions?

> Roy Lewallen, W7EL

You've pretty much summed up the situation Roy.

It is impossible to have any sort of meaningful technical discussion with the fractenna personas; it always goes to name calling and flames no matter how hard one tries to stay on the (technical) subject.

The personas are impossible to ignore either because one is new to the group and gets sucked in or the post is so outrageous one has to resond.

It is my personal opinion that the fractenna personas are, in the vulgar usage, flat out insane.

In another time, in my personal opinion, the fractenna personas would be sent to a place where they could not disrupt polite society.

Perhaps we should treat this as was done about a century or so ago. Everyone in town know who the town drunk/crazy way and basically ignored their antics as long as no one was hurt. When someone new came to town, they were told something along the lines of "Don't be concerned with old (fill in the name), he's a bit touched in the head, but he's harmless."

Perhaps this is the way to go with our current problem...

Jim Pennino

3147. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D00479.5EA538C0@hiwaay.net>
Source record: 179497

ROTFLMAO- OAOAO (over and over and over)

Hope this helps

Bill

Fractenna wrote:
>
> >
> >One persistent JERK has caused several people to leave the
> >group in disgust. This behavior continues and the JERK does
> >not appear to have a conscience or any self decency. This
> >really upsets me as I enjoy learning from several of the
> >experts provided that I can weed through the nonsense.
> >
> >Has the group ever considered going to a moderated group with a
> >reasonable posting policy? I know that many folks don't like
> >the idea of a moderated group but virtually everyone dislikes
> >the constant behavior of this one person who can't possibly
> >have so much free time and a job. This would fix most of the
> >problems and instantly reduce the number of posts by 1/6th
> >without loss of any content. Remember that this one bad apple
> >is responsible for 1/6th of the posts. I don't know who would
> >want the unenviable job of moderator. Am I way off base here
> >or do some folks actually enjoy this infantile behavior?
> >
> >Larry, W0QE
> >
>
> I think a moderated RRAA is a great idea Larry.
>
> If I had the time I would volunteer.
>
> 73
> Chip N1IR

3148. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <24376-39D00584-151@storefull-117.iap.bryant.webtv.net>
Source record: 179498

Wes, N7WS wrote:
"Sure. But are you suggesting that once a tower has been hit by lightning it should be taken down because all of the rebar in the concrete base has been vaporzed? <g>"

Oh, no! The concrete will remain strong in compression. The tower should come down because the lightning has destroyed the temper of the tower steel leaving only the strength of a damp noodle. <g>

Best regards, Richard Harrison, KB5WZI

3149. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qp1o8$7j3$1@iac5.navix.net>
Source record: 179499

Gentlemen:
While I applaud your efforts to bring things to a logical conclusion I feel compelled to say your attempts are fraught with danger.

I seriously feel that Chip's mental state is so precarious you may push him over the edge. I envision attacks directed towards both you and Steve for being in collusion in bringing down the fractal empire. Along with gnashing of teeth and charges of "Criminal acts and deliberate malicious actions against Fractal Antenna Systems".

While I enjoy tying a tin can or two to his tail, in this case I am extremely serious. Steve, in particular faces the gravest attacks as Chip will purport that "Cushcraft antennas are out to get him". This in spite of the fact that Steve has been patient throughout the entire debacle. Please proceed with care through this minefield set by an egomaniac.

I don't want to be in the unenviable position of being able to say "I told you so..."

Warmest regards to both of you
Fred W4JLE

"VE9SRB" <srbest@worldnet.att.net> wrote in message
news:p6Mz5.3949$s76.304424@bgtnsc06-news.ops.worldnet.att.net...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:39CF88EE.3BF8A42A@eznec.com...
> > It seems rather foolish (and childish) for people to brag about the
> > performance of their antennas based on an EZNEC model, then refuse to
> > let anyone (or those not considered worthy) see the model. And a public
> > challenge where challengers are required to beat an antenna but not
> > allowed to see a model of it is pretty silly.
> >
>
> Hi Roy:
>
> It's also pretty silly to compare performance of an antenna at the 10ths
of
> a dB and 10ths of a % BW level but that's where we are.
>
> > So here's what I'll do. I'll be glad to post any EZNEC models involved
> > with this discussion on my web site for any interested person to
> > download. I'll put them in a public directory, and you won't even have
> > to look at my site itself in order to get the files by ftp.
> >
> > Roy Lewallen, W7EL

>
> I will be quite willing to put up any of my EZNEC files for public
> distribution. I assume that Dr. Cohen will as well. I also assume that
you
> will post the files when they are ALL available.
>
> Thanks Roy.
>
> 73,
> Steve VE9SRB
>
>

3150. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D014E1.D4CE833D@eznec.com>
Source record: 179500

I'm not at all surprised at Chip's inability to distinguish between
"dislike" and "hate".

(My statement was: "I've come to dislike the person himself, not just
what he
says. This isn't just because of his rude responses to me, but also
because of what he's done to everyone else he encounters here.")

I can't think of anyone I hate. I do dislike bullies, and adults who act
in an insulting, rude, arrogant, or childish fashion, and Chip does all
of these. There are a very few people I know in this category, since I'm
generally able to simply avoid them. I refuse, though, to turn over this
newsgroup to someone who fits this description, so it looks like Chip is
someone I've got to put up with. And conversely.

Roy Lewallen, W7EL

Fractenna wrote:
>
> I see no reason to go by his offer. Roy has now publicly gone on record as
> saying that he hates me. . .

3151. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <d53pq8.3mf.ln@mail.specsol.com>
Source record: 179501

Fractenna <fractenna@aol.com> wrote:
>>
>>One persistent JERK has caused several people to leave the
>>group in disgust. This behavior continues and the JERK does
>>not appear to have a conscience or any self decency. This
>>really upsets me as I enjoy learning from several of the
>>experts provided that I can weed through the nonsense.
>>
>>Has the group ever considered going to a moderated group with a
>>reasonable posting policy? I know that many folks don't like
>>the idea of a moderated group but virtually everyone dislikes
>>the constant behavior of this one person who can't possibly
>>have so much free time and a job. This would fix most of the
>>problems and instantly reduce the number of posts by 1/6th
>>without loss of any content. Remember that this one bad apple
>>is responsible for 1/6th of the posts. I don't know who would
>>want the unenviable job of moderator. Am I way off base here
>>or do some folks actually enjoy this infantile behavior?
>>
>>Larry, W0QE
>>

> I think a moderated RRAA is a great idea Larry.

> If I had the time I would volunteer.

> 73
> Chip N1IR

This poster has, in my personal opinion, a track record of abuse and troll
like posts.

Do not resond to this post. This person, in my personal opinion, is not worth
the bandwidth.

For those that have doubts, go to www.dejanews.com and do an advanced
search with the following parameters:

Forum: rec.radio.amateur.antenna

Author: fractenna

Keywords: "this thread is closed" 53 hits last count
"lawsuit" 47 hits last count
"death threat" 11 hits last count

Jim Pennino

3152. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <h73pq8.3mf.ln@mail.specsol.com>
Source record: 179502

Fractenna <fractenna@aol.com> wrote:
>>>I see no reason to go by his offer. Roy has now publicly gone on record as
>>saying that he hates me.<
>>
>>That's a major accomplishment! Getting Roy Lewallen to hate you must be like
>>working country 390 QRP. I know it took a lot of work and a lot of
>>persistence
>>to win that honor, cause I don't know anyone else who's ever achieved it!.
>>
>>Face it, Chip. Virtually everybody on here probably hates you. Perhaps you
>>never repaired TVs, but lacking more utilitarian skills, I'm sure you're at
>>least a former bed-wetter.
>>
>>73
>>
>>Rick K1BQT
>>

> OK, so they hate me--according to you.

> That changes nothing for me.

> I have a family and friends and meaningful work to a focused and dedicated
> life. I enjoy helping others and do so on a daily basis. I enjoy discovering
> the workings of nature and do so at every opportunity.

> I enjoy the excitement and satsifaction of bringing into being a new technology
> and field of science, and extending the reach of others.

> It is a full and meaningful life.

> And of course, there is Mozart with Nachtmusik kissing the evening air as I
> type.

> I love being alive and will continue sucking its marrow.

> Just wanted to reassure you of my course and resolve.

> With Best Wishes,
> Chip N1IR

This poster has, in my personal opinion, a track record of abuse and troll
like posts.

Do not resond to this post. This person, in my personal opinion, is not worth
the bandwidth.

For those that have doubts, go to www.dejanews.com and do an advanced search with the following parameters:

Forum: rec.radio.amateur.antenna

Author: fractenna

Keywords: "this thread is closed" 53 hits last count
"lawsuit" 47 hits last count
"death threat" 11 hits last count

Jim Pennino

3153. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <g93pq8.3mf.ln@mail.specsol.com>
Source record: 179503

Fractenna <fractenna@aol.com> wrote:
>>>...and will continue sucking its marrow.<
>>
>>How could I possible add to that?
>>
>>73
>>
>>Rick K1BQT
>>

> With deference to Thoreau, please don't try.

> 73
> Chip N1IR

This poster has, in my personal opinion, a track record of abuse and troll like posts.

Do not resond to this post. This person, in my personal opinion, is not worth the bandwidth.

For those that have doubts, go to www.dejanews.com and do an advanced search with the following parameters:

Forum: rec.radio.amateur.antenna

Author: fractenna

Keywords: "this thread is closed" 53 hits last count
"lawsuit" 47 hits last count
"death threat" 11 hits last count

Jim Pennino

3154. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D01718.C53577CF@eznec.com>
Source record: 179504

If the roof is large and solid metal, the input impedance of the antenna would act like the antenna is 8 feet from a perfect ground. At very high angles, the antenna pattern would resemble the pattern of an antenna 8 feet high. At moderate and low angles, the antenna pattern would look like the pattern of an antenna 24 feet high. If the roof isn't metal, the antenna will probably behave like it's 24 feet high, except for interaction with various conductors in and around the house, like wiring, metal rain gutters, and the like.

If you laid the antenna on the ground, it would be quite lossy and no longer resonant. Your signal strength would be down considerably (I'd guess on the order of 20 dB or so) compared to the antenna on the roof.

Why don't you make two antennas, and put one on the roof and the other on the ground. Rig up a switch so you can switch between them, and see how much the signals change when you do. Just don't assume the marks on your S meter are 6 dB apart; if you really want to know how many dB different they are, build a step attenuator and put it in line with the rooftop antenna. Switch in attenuation until they're equal.

You should be able to build the antennas in an afternoon, the step attenuator in an evening. A good weekend project, and you'll know a whole lot more when you're done.

Roy Lewallen, W7EL

Wayne Jones wrote:
>
> Hi, it's Wayne who started this post.
>
> Does the roof constitute a ground? For instance, if the roof is 16 feet
> high and the antenna is 8 feet over the roof, is the antenna now 24 feet
> above ground or is it now 8 feet?
> Is the antenna is better on the roof because of it's sheer altitude or
> height above ground? What if I just laid it on the roof?
>
> Wayne

3155. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <974pq8.5sg.ln@mail.specsol.com>
Source record: 179505

Brian Kelly <kelly@dvol.com> wrote:

> CAM wrote:

>> "David J. Windisch" wrote:
>> > DAEAMMMMM! That's ironic! Apologies all around for an unknown cause.
>>
>> If Netscape says it's waiting for a reply and never gets one,
>> the article has most likely been published.

>>
> Fer damned stright, hit "send" in Messenger ONCE and go to bed!
>>
> Fuggit all, I'm on my way to Linux. This is ridiculous.
>>
> b.

A good idea.

You can download Star Office from www.sun.com for free and deal with those
that persist in useing Microsoft word/excell/etc.

You can download twpsk from aintel.bi.ehu.es/psk31.html and have 3 receive
windows in addition to the main window.

You can run real news readers, etc.

The only downside is there is no Linux version of EZNEC.

Jim Pennino

3156. Newsgroup jammers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <i45pq8.5sg.ln@mail.specsol.com>
Source record: 179506

While this is an open newsgroup and all are free to post, certain individual(s) have persisted in postings that have no content other than to create flames, i.e. a newsgroup jammer if you will.

Given the delays in newgroup propogation, I propose the following:

When the "jammer" makes a post, respond with something similar to the following:

This poster has, in my personal opinion, a track record of abuse and troll like posts.

Do not resond to this post. This person, in my personal opinion, is not worth the bandwidth.

For those that have doubts, go to www.dejanews.com and do an advanced search with the following parameters:

Forum: rec.radio.amateur.antenna

Author: fractenna

Keywords: "this thread is closed" 53 hits last count
"lawsuit" 47 hits last count
"death threat" 11 hits last count

Once one sees such a follow up, no further post is necessary.

Of course, all of this is purely my personal opinion based on observation of certain posters, some of which in my personal opinion are emotionally unstable.

Jim Pennino

3157. Re: HS-1500 for home use

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: John Timmers <timmers@telus.net>
Message-ID: <39D01534.548C8F8@telus.net>
Source record: 179507

Denis Sharon wrote:
>
> I mounted the antenna on High Sierra's tripod using the wire lathe
> counterpoise arms supplied. Using the ICOM 706, I made one contact on 75m to
> North Carolina where I was reported as "very strong". I made the second
> contact on 17m to Northeastern Belgium and the third contact on 12m to
> Northeastern Scotland. I quit there. Certainly not conclusive testing by any
> means but enough to tell me that it clearly is going to work out fine.
>
> The tuning mechanism worked as well as expected although some type of
> indexing to enable returning to a previous position would be very welcome.
> Lacking that, even travel limit switches would be vast improvement over the
> rather funky and ambiguous LED end-of-travel indicator.

Sounds like you're a candidate for the SAM "Screwdriver Antenna Memory"
product at this page:

http://155.dsl9228.rcsis.com/

I'm considering getting one myself...
--
Regards:
Linux User # 78321 @ http://counter.li.org
Personal Website http://www3.telus.net/timmers

3158. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <p16pq8.5sg.ln@mail.specsol.com>
Source record: 179508

Wayne Jones <wrjones1@home.com> wrote:
> Hi, it's Wayne who started this post.

> Does the roof constitute a ground? For instance, if the roof is 16 feet
> high and the antenna is 8 feet over the roof, is the antenna now 24 feet
> above ground or is it now 8 feet?
> Is the antenna is better on the roof because of it's sheer altitude or
> height above ground? What if I just laid it on the roof?

> Wayne

Depends on the roof.

If the roof is metal, or there are a LOT of metal things in the roof...

Otherwise, you are 24 feet up.

I wouldn't lay anything directly on the roof even if it is wood shigles
'cause there will allways be some interaction, especially when it rains.

If it is the normal, average wood frame construction and a non metal roof,
once you are a few feet away, you can basically ignore the house structure.

In my case, there is a bunch of AC ducts (among other things) in the "attic".

Once I get a about 3 or 4 feet away from the roof, the house basically isn't
there (at 20M and above) as far as RF is concerned.

Jim Pennino

3159. RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39d02844$0$1346$45beb828@newscene.com>
Source record: 179509

I have some major RFI coming from my atic-mounted dipole (about 25 feet away from home theater). After some suggestions I put some Palomar RFI beads (actually the split beads) around the speaker wires (monster-brand) right after they exit the stereo.

Question: The speaker runs are quite long. Do I need to add more beads at the stereo end? If I do, will I still get it, and if so will puting them at the speaker ends (in the wall) help? The speakers are B&W large in-wall speakers (not sure of model number).

I am considering a tripod mounted beam antenna that will raise the antenna another 10 to 15 feet from the dipole. Will that help much or still too close.

Thanks. Running only 100-150 watts.

--jeffrey steinberg, kc2guc

3160. Re: RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Richard Crowley <rcrowley7@xprt.net>
Message-ID: <t6Wz5.12489$nM4.415270@east5.usenetserver.com>
Source record: 179510

Why do you think the RFI is getting in through the speaker lines? That is the least likely place in my experience. It is extremely low impedance and extremely low sensitivity (relative to the line level wiring.) Have you performed the logical debugging processes?:

Disconnect the speaker lines at the amplifier and short the speaker lines together at the amplifier end. You now have the speaker lines formed into the optimal RFI pickup antenna. Do you still hear RFI from the speakers? No? Then the RFI isn't getting in through the speaker lines. If yes, then you are living in such a strong RF field that I would be worried about many more important things than a little RFI in my surround speakers. Have you had all the children you were planning? Have you lined all your hats with tinfoil? :-)

Reconnect the speakers and short the input to the power amp. Do you hear RFI? If yes, then maybe the RFI is getting into the amplifier via the speaker lines. You didn't say whether the ferrite beads had any effect on the RFI(!) If RFI is getting to the amp through the speaker output and the ferrite beads didn't eliminate the RFI, try adding turns through the ferrite bead. Also try small value capacitors across the speaker output terminals and/or from each side to chassis ground. The capacitors would be the "C" half of the LC low pass filter(!)

If you don't hear RFI with the power amp input shorted, then its coming in before the power amp and any treatment of the speaker lines is superfulous. You'll have to work your way back through the chain until you find "the spot".

RC

"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:39d02844$0$1346$45beb828@newscene.com...
> I have some major RFI coming from my atic-mounted dipole (about 25 feet
> away from home theater). After some suggestions I put some Palomar
> RFI beads (actually the split beads) around the speaker wires
(monster-brand)
> right after they exit the stereo.
>
> Question: The speaker runs are quite long. Do I need to add more beads
at the
> stereo end? If I do, will I still get it, and if so will puting them at
the
> speaker ends (in the wall) help? The speakers are B&W large in-wall
speakers
> (not sure of model number).
>

> I am considering a tripod mounted beam antenna that will raise the antenna
> another 10 to 15 feet from the dipole. Will that help much or still too
close.
>
> Thanks. Running only 100-150 watts.
>
> --jeffrey steinberg, kc2guc
>
>

3161. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D0200F.AEA@pacbell.net>
Source record: 179511

Richard Clark wrote:
>
> On Mon, 25 Sep 2000 14:08:07 -0700, Donaly <dtdonaly@pacbell.net>
> wrote:
>
> >Richard Clark wrote:
> >
> >(snip)
> >
> >> To those who cannot find peers in this forum: you are probably in the
> >> wrong place, serf.
> >>
> >> To those Wild Eyed Missionaries who proclaim their calling takes them
> >> to foreign lands (our back yard) where they have no peers - yeah. We
> >> have a College of Cardinals. Missionaries sit below the salt.
> >>
> >> 73's
> >> Orlando Furioso, KB7QHC ;->
> >
> >Hi, Orlando,
> > glad to see you on the newsgroup. I hope you're not
> >still sore about losing Angelica to that Moorish fellow, Medoro.
> >A medieval hero who goes crazy over the love of a woman, and kills
> >bears with his bare hands to prove it, is just what this newsgroup
> >needs. It's got everything else.
> >
> >73
> >
> >Tom Donaly KA6RUH
>
> Hi Tom,
>
> The discussion of the classics would probably come to a more
> satisfying conclusion than having to live them by mutated proxy within
> this group.
>
> My choice for a better depiction of Roland (Orlando) would be "La
> Chanson de Roland." (It is consistent with the sacrifices made.)
>
> 73's
> Richard Clark, KB7QHC paladin to the court of Charlemagne ;->

Hi, Richard,
my old encyclopedia says that the historical Roland

was killed by Basques in the Pyrenees, poor fellow, not by Saracens
in Roncesvalles. My sympathies have always been with the Saracens.
(Visigoths have never been much thought of by historians,
nor by me, nor, I might add, by the Moors.)
At any rate, the reason I responded to Orlando, was that, fighting
bears, dragging a dead horse around with one hand while uprooting
trees with the other, and carrying on in a state of complete hysteria
and wooden wroth is what I feel like doing every time I see a
post dealing with fractal antennas that:
1. Assumes that fractal shapes are optimal in some sense
without either explaining or proving it.
2. Relies on computer-derived numerical approximation techniques
to "prove" one thing or another about something as amorphous and
vague as a shape formed by an algorithm, that, if carried on forever,
might produce something that very closely resembled the vague
mathematical abstraction called a fractal.
3. Doesn't make at least a non-mathematical attempt to
explain why the current distribution on a so-called fractal shape
is any better for producing a given far-field pattern than the
current distribution on any other object, such as a dipole, or even
a bronze mermaid.
4. Expects a simple amateur like me to accept anything as
truth without a detailed, and thorough explanation, replete with
experiments, measurements, and even, where possible, a little
diversion into -dare I type it?- mathematics.

Tom Donaly KA6RUH

(P.S. Time to do as Tom Rauch does and put my straw through the
screen and suck up some of Cecil's good whiskey - providing there's
any left, of course.)

3162. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qprl0$at4$1@neptunium.btinternet.com>
Source record: 179512

Gary, are you quoting measurements reported by other people
or are your statements on conductivity and dielectric
constant your own determinations ?

Reg.

3163. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <5_Lz5.1929$xf7.5544@newsfeed.slurp.net>
Source record: 179519

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3164. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <p6Mz5.3949$s76.304424@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179520

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39CF88EE.3BF8A42A@eznec.com...
> It seems rather foolish (and childish) for people to brag about the
> performance of their antennas based on an EZNEC model, then refuse to
> let anyone (or those not considered worthy) see the model. And a public
> challenge where challengers are required to beat an antenna but not
> allowed to see a model of it is pretty silly.
>

Hi Roy:

It's also pretty silly to compare performance of an antenna at the 10ths of
a dB and 10ths of a % BW level but that's where we are.

> So here's what I'll do. I'll be glad to post any EZNEC models involved
> with this discussion on my web site for any interested person to
> download. I'll put them in a public directory, and you won't even have
> to look at my site itself in order to get the files by ftp.
>
> Roy Lewallen, W7EL

I will be quite willing to put up any of my EZNEC files for public
distribution. I assume that Dr. Cohen will as well. I also assume that you
will post the files when they are ALL available.

Thanks Roy.

73,
Steve VE9SRB

3165. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <7%Lz5.1930$xf7.4812@newsfeed.slurp.net>
Source record: 179521

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3166. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <80Mz5.1932$xf7.1681@newsfeed.slurp.net>
Source record: 179522

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator, By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid 1000+ posts a week over the last 3 weeks, according to Deja stats, to wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3167. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <h1Mz5.1933$xf7.5117@newsfeed.slurp.net>
Source record: 179523

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3168. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <j2Mz5.1934$xf7.5647@newsfeed.slurp.net>
Source record: 179524

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3169. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <l3Mz5.1936$xf7.5451@newsfeed.slurp.net>
Source record: 179525

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3170. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <n4Mz5.1937$xf7.5694@newsfeed.slurp.net>
Source record: 179526

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3171. Hitting a Record ..

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <s5Mz5.1940$xf7.5771@newsfeed.slurp.net>
Source record: 179527

.. Q-pace in 15-minute non-contests on a wide-open band is one thing.

Among other things: I notice that Bub, BA, the Boston University Bloviator,
By Accolade, aka Sob, the Scourge of Belmont, has been averaging a torrid
1000+ posts a week over the last 3 weeks, according to Deja stats, to
wreck.radio.a.a.

That's about 16% of the weekly traffic.

Wow! That thing really posts!

K3BHJ

3172. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39cf7fa9.137363254@news.azstarnet.com>
Source record: 179528

On Mon, 25 Sep 2000 09:15:14 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Wes, N7WS wrote:
>"So how many joules does it take and is the number representative of a
>lightning discharge?"
>
>Sure, it represents the energy in some discharge, but the test energy
>was less than that in some discharges and more than that in others.
>
>Sufficient current through a solution vaporizes it rapidly. Examples
>abound of the power in expanding gas.

Sure. But are you suggesting that once a tower has been hit by lightning it should be taken down because all of the rebar in the concrete base has been vaporized? <g>

[snip]

Wes, N7WS

3173. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <_yMz5.2$p2.262@newsfeed.slurp.net>
Source record: 179529

DAEAMMMMM! That's ironic! Apologies all around for an unknown cause.

K3BHJ

3174. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39d7856c.263729102@news.seanet.com>
Source record: 179530

On Mon, 25 Sep 2000 16:34:51 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>
>"Richard Clark" <rclark@epicedge.com> wrote in message
>news:39d4773f.260100695@news.seanet.com...
>> On Mon, 25 Sep 2000 15:41:27 GMT, "VE9SRB" <srbest@worldnet.att.net>
>> wrote:
>>
>> Insofar the call for you to submit your work to peers, I would
>> embellish that so as to draw the focus to a CREDIBLE RESOLUTION:
>>
>> Submit your work in escrow to a panel of judges composed of members in
>> this forum. This is the peerage called rec.radio.amateur.antenna.
>>
>> 73's
>> Orlando Furioso, KB7QHC ;->
>
>Richard,
>
>Works for me.
>
>Steve
>

Hi Steve,

Now for the hard part. I originally wanted to include in my post that you were to pick this panel. But perhaps that was too much expectation on my part and too presumptive for those you might pick. This method would work faster though.

Why do I say faster? Because those who have railed against this comedy of errors are here only for the pleasure of the personality games - I have seen no effort to resolve issues, merely highlight and pursue them.

There is also the problem of stacking the panel with judges who are favorable to your problem (although with technical issues to be adjudicated this hardly seems a problem - but I can imagine that it could become one).

So does it simply devolve to a beauty contest where everyone votes? That hardly seems a better solution - but in all likelihood there will be some element in this no matter what direction this goes (even if it goes no where).

What am I fishing for then?

Where are the volunteers for this? There is a ton of criticism, even from the grey-backs who are a touch too much insulated from the problem, but can toss their own barbs into the mix none-the-less. No one's hands are clean in this regard. From this rough and tumble crew, no one has stepped forward with the obvious resolution and the parade of personality runs undeterred, full steam ahead.

So volunteerism does not seem to be the answer either.

To that crew so happy to pine away about the loss of congeniality, your empaneling will not be missed until we get to a manners shoot-out.

I guess its back to my first notion then. Steve, unfortunately you haven't been engaged in this forum long enough to discern the members here who genuinely could serve this capacity. Or perhaps you've been lurking long enough (which would be my hope). Either way, I will not make any suggestions. I could, there are, as I say, many to choose from. As an alternative I would offer that a choice of half a dozen names drawn randomly from those posting from the past week would easily provide an empaneled Jury that would do a far better job than the farce presented as the $1000 Challenge.

Who would be the source of the Challenge goal? Yourself. Name any criteria and submit to the Judge's modifications that occur on the basis of clarification of your Challenge. If you cannot abide, then you cease to be a participant - the Challenge goes on without you.

So to toss out the first grenade, the Challenge is:
Employing the exact criteria already established in the $1000 Challenge, members are to submit to the newsgroup their designs for the best MI2 design. Steve's will be held in escrow until the end so that no one can claim his is a copy of theirs from years ago.

If this is problematic for some poster's, then they may submit, in escrow, to the empaneled Jury who would in turn judge the technical merits without revealing the designs' details (principally the wire list). This is not the best solution, and it even goes against the grain of fair and open discussion. So, some sun-set provision must be made that all escrowed designs will be made public at some established future date.

Steve, choose your Jurists, allow them time to decline or accept, and then submit both your Challenge and your design to them. We want an honest technical competition, not a beauty contest where the obvious conclusion is the masked champion wins, remains anonymous, and the money goes to charity (such synthetic virtue is repugnant - the Camel will get through the eye of the needle before this generosity is recognized).

73's
Richard Clark, KB7QHC

3175. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf8500.27318679@news.akorn.net>
Source record: 179531

On 25 Sep 2000 12:39:22 GMT, fractenna@aol.com (Fractenna) wrote:

>Tom, as (you are) a former TV repairman, I am curious to know what skill set
>you bring to the table to act in such a capacity.

I own a large cattle farm, with hundreds of head of cattle and several
prize bulls.

It is the finely honed skill of being able to walk through the
pastures without ruining shoes that allows me to fully recognize the
quality of your technical writing.

>>The one or two sentences were:
>>
>>"Sometime some fractal shapes work better than other shapes in some
>>antennas, sometimes they don't"
>>
>>"At times a fractal shape has one or more characteristics that are
>>useful"
>
>Could you please give us the reference? If this is a copyright article , held
>by Fractal Antenna Systems, Inc., I give you permission to quote it here.

Apparently your reading skills are as poor as your writing skills.
Those sentences represent my summary of the articles I reviewed.

I appreciate your trolling me, but I won't take the bait.

Why not ask the people in this group for their candid opinions of the
technical quality of your articles? Anyone have any opinions, now that
Chip has opened the door for critical review?

73 Tom

3176. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39d8990c.268753837@news.seanet.com>
Source record: 179532

On Mon, 25 Sep 2000 17:01:15 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>I am embarrassed at the foolish ranting of Dr. Cohen and the fact that I
>find myself compelled to respond to them - most importantly when they
>unprofessionally address the issue of my employment.

Hi Steve,

This is the method of the TROLL.

DO NOT RESPOND TO TROLLS.

I can appreciate you might want to respond - in part - do so. But
where there are matters that are not germane to the issues - simply do
not discuss them and do not repeat them within the response. This
will work just as well. It will also either force the correspondence
to attend to issues - to which you can respond in kind. Or it will
force the correspondence to diverge into these unrelated issues - to
which you can entirely ignore.

You are not defined by scurrilous remarks of a TROLL, so don't respond
as though you were!

73's
Richard Clark, KB7QHC

3177. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf995b.32529839@news.akorn.net>
Source record: 179533

On 25 Sep 2000 12:45:24 GMT, fractenna@aol.com (Fractenna) wrote:

>No; the malicious interefernce consisted of fould languiage, carriers;
>'uhhhhhhh' and so on.
>
>Do you know anything about it?
>
>73
>Chip n1IR

Seeing the firestorm you create on this newsgroup, and understanding
your posts are read worldwide, I'm amazed you can even get on the
radio!

If you behave on the air like you do here, you probably draw jammers
like dead animals draw flies.

Hope this helps.

73 Tom

3178. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39d99b0f.269268607@news.seanet.com>
Source record: 179534

On Mon, 25 Sep 2000 10:18:38 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>It seems rather foolish (and childish) for people to brag about the
>performance of their antennas based on an EZNEC model, then refuse to
>let anyone (or those not considered worthy) see the model. And a public
>challenge where challengers are required to beat an antenna but not
>allowed to see a model of it is pretty silly.
>
>So here's what I'll do. I'll be glad to post any EZNEC models involved
>with this discussion on my web site for any interested person to
>download. I'll put them in a public directory, and you won't even have
>to look at my site itself in order to get the files by ftp.
>
>I'll also translate to EZNEC format any submitted NEC-2 or NEC-4 file
>and post the resulting EZNEC file. This ability is a standard feature of
>EZNEC pro, which will be used for the translation. Note: Not all NEC
>"cards" can be translated; I'll let the person submitting the file know
>if it can't be accurately translated.
>
>As I upload each file, I'll post on this newsgroup the name of the file,
>the date submitted, and the person submitting it. Otherwise, I won't
>comment on the files or modify them in any way, unless one is received
>with an already-used name, in which case I'll modify the name with the
>permission of the person submitting it. (I might also put a text file on
>the web site in the same directory as the files explaining what they
>are.)
>
>I strongly suggest that each file be accompanied by an "antenna notes"
>file. This is simply an ASCII text file with the same base name as the
>EZNEC file, but with a .txt extension. It should include anything you
>want to say about the antenna or model. I suggest you also include your
>name and the date in this file. In the case of NEC files, put this on CM
>"cards" -- EZNEC pro will extract these to the "antenna notes" file.
>EZNEC 3.0 users can create and edit this file within EZNEC if desired.
>Others can create it with any text editor such as Notepad. I hate to
>take the role of "moderator", but since they'll be on my web site, I
>will take a look at these, and won't post any which contain personal
>comments about individuals or the like -- you know what I'm talking
>about. Please keep them objective and focused on the antenna and/or
>model. (I won't edit them in any way or reject any on the basis of any
>claims about the antenna. I'm simply trying to keep personal comments
>and insults out.) If anyone does submit a text file that's
>objectionable, I'll let him know, and will explain the problem. Or, if

>he prefers, the model can be posted on the web site without notes, and
>he can post any comments he likes on the newsgroup.
>
>Because I'm not editing or passing judgement on any of these files
>except as noted above, I don't endorse them or any claims made for them,
>either in the text file or elsewhere, in any way. I'm just offering to
>post them in a publicly available spot.
>
>All you need to do to get your model posted is to attach it (and
>accompanying notes file) to an email message to me, with a clear request
>for me to post it on my web site. This offer includes only models
>involved with the MI2 "challenge". I won't post, or share, anything
>anyone sends unless it's accompanied by an explicit request to do so.
>
>Very few of the readers of this newsgroup have access to EZNEC pro, so
>most are limited to a maximum of 500 segments. Please note if your model
>contains more than this number.
>
>It seems that the Fractenna web site would be more appropriate for this,
>but I'm glad to help.
>
>Roy Lewallen, W7EL

Hi Roy,

Thank you for proving my pessimistic view of volunteerism is wrong!

If only I were dreadfully wrong - then my day would be made.

73'S
Richard Clark, KB7QHC

3179. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf9b0b.32962084@news.akorn.net>
Source record: 179535

On Mon, 25 Sep 2000 12:28:00 GMT, Dale Parfitt <GTE/parinc@GTE.net>
wrote:

>Hi Phil,
>
>Is this a 1 wavelength loop? If so, a 1 wave loop has slightly less gain
>than a dipole- nearly identical pattern and at least when I modeled it,
>the BW was a little less than a dipole. Given that, I would go with a
>dipole.
>
>Dale W4OP

I agree with Dave's overview.

There is a misplaced notion that a full-wave horizonatal loop placed
close tom earth has some gain or DX advantage over a dipole.

That isn't true.

Put up a dipole and save money. It will work just as well.

73 Tom

3180. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CFA045.2992DB6@bellatlantic.net>
Source record: 179536

Fractenna wrote:

> Tom, as (you are) a former TV repairman, I am curious to know what skill set
> you bring to the table to act in such a capacity.

What in the hell does a person being a former anything have to do with
one's present capability in a different area?

Does the fact that you were a former undeucated child mean that you
are now an uneducated man? Your suggested "logic" is utterly bizzare.
I find it offensive that you attempt to denigrate others so often. I find
it offensive that you imply that TV repairmen (current or former) are
intellectually inferior. I find your constant attacks on Tom repugnant.
Such behaviour is abominable.

And the kicker is that Tom has demonstrated a considerable and
extensive knowledge and undertsanding of antennas on this NG,
which you cannot match. You are not even capable of recognizing
the fact.

Your mind is closed.

3181. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <876oq8.ctc.ln@mail.specsol.com>
Source record: 179537

Tom W8JI <2w8ji@contesting.com> wrote:

<snip>

> Why not ask the people in this group for their candid opinions of the
> technical quality of your articles? Anyone have any opinions, now that
> Chip has opened the door for critical review?

> 73 Tom

On a technical writing level, the words that come to mind are; overly verbose,
obfuscatory, vague, poor sentence structure, atrocious spelling.

Chip's writing reminds of a report I read once. It took close to 100 pages
to say y=m*x+b.

Jim Pennino

3182. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ef6oq8.ctc.ln@mail.specsol.com>
Source record: 179538

K1BQT <k1bqt@aol.com> wrote:
> Hi Steve--

>>I did not ask for Dr. Cohen's help.<

> It appears you aren't in need of it.

> I think it's time for Chip to cut the bullshit and show us what he's got.
> Anyone else feel that way??

> Rick K1BQT

Yes, but it will never happen.

Jim Pennino

3183. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qo83jpgs1@iac5.navix.net>
Source record: 179539

First of all, you are NOT an antenna engineer! You have no more expertise in the field than any other ham that has studied the field. Your credentials have nothing to do with antenna design.

Your denigration of Tom does little to elevate your position in life or on the newsgroup. Calling you an eminent antenna engineer can be likened to calling the M12 a good antenna. You have used a GA to generate a fractal shape that you can neither explain or understand why it works.

"Fractenna" <fractenna@aol.com> wrote in message
news:20000925083922.25741.00000787@ng-mg1.aol.com...
> >
> >On 25 Sep 2000 11:27:12 GMT, fractenna@aol.com (Fractenna) wrote:
> I think it is a pity that ham radio has chosen to use reviewers--or so you
> claim-- that are competent technicians (such as TV repair) but not antenna
> engineers with defineable track records.

3184. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <aBNz5.24$fx6.1110@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179540

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924221311.14996.00000641@ng-cb1.aol.com...
>
> Nathan Cohen, Ph.D.

For reasons that I cannot discuss on this NG, this will be my last and final
post.

Private correspondence welcome.

73,
Steve, VE9SRB

3185. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7MNz5.4$ai4.26605@news.ntplx.net>
Source record: 179541

Fractenna <fractenna@aol.com> wrote:

> Are you implying that Dean Straw was part of the assessment in my QST
> submission (of the first fractal antenna manuscript) which the ARRL
categorized
> as an "April Fool's joke?"

I don't know, Chip. What time frame? Dean has been with ARRL HQ staff for
a while, but I don't recall when he started. Also, the editor generally does
a triage of articles and doesn't send them all to Dean or other reviewers.
I don't know what exact process was used to evaluate and return with thanks
that article.

73,
Ed Hare, W1RFI

3186. Spam solution and filter

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Wayne Grauel <wgvideo@kill.attglobal.junkmail.net>
Message-ID: <39CFA9ED.23778B48@attglobal.net>
Source record: 179542

I found this from another source. I started getting spam since I made some posts. This program will mask your email address to what ever your choose when in netscape, yet retains your email identity for notmal; email operations... Hope this helps some of you.

To use a munged address for news postings with Netscape without hurting your email return address, go download FixNews
http://www.desisoft.com/fixnews/
This lovely little program lets you have a munged news address, and it supports a killfile besides. If you read newsgroups with javascript turned on, it will also prevent your browser from being hijacked by malicious posters. (Javascript on in mail and news remains a bad idea anyway)
Wayne
N3TNS

3187. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CFA94A.5F681AB1@bigfoot.com>
Source record: 179543

"David J. Windisch" wrote:
> DAEAMMMMM! That's ironic! Apologies all around for an unknown cause.

If Netscape says it's waiting for a reply and never gets one,
the article has most likely been published.
--
http://www.mindspring.com/~w6rca

3188. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CFB16E.E90CDE76@hiwaay.net>
Source record: 179544

I've felt that way, BIG TIME, for a long time- he is all puff and no
dragon.

I hope this helps

Bill-W4BSG

K1BQT wrote:
>
> Hi Steve--
>
> >I did not ask for Dr. Cohen's help.<
>
> It appears you aren't in need of it.
>
> I think it's time for Chip to cut the bullshit and show us what he's got.
> Anyone else feel that way??
>
> Rick K1BQT

3189. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Eric Sims (Ric)" <kg4bnl@k4tlh.org>
Message-ID: <39CFB57F.88327F00@k4tlh.org>
Source record: 179545

Your a hoot dude! Are you ever on 3.950? Now that my broadbanded 80/75 meter dipole is kick'in it, I'll listen fer 'ya (ya, the 4 call means I might be a stump jumper).

Ric

Gary McAdams wrote:

> Yo! Barry!
>
> Thanks for your setting me straight!
>
> I'll just go kill myself now.
>
> But before I get out the Hari-Kari knife,
> (A division of Ginsu Industries Ltd.)
>
> Let me just say this:
>
> Bite me.
>
> Let a cb'er get info on CB antennas on the CB news group.
>
> Now back to the regularly scheduled arguments,
> backstabbing, and insulting that normally goes
> on here.
>
> I'm off to sharpen a knife...
>
> Gary.
>
> --
> Sarcasm is wasted around here....
>
> Barry D <x123x123@yahoo.com> wrote in message
> news:Xvwz5.210554$c5.4462052@news2.rdc1.on.home.com...
> >
> > Gary you are an idiot. There is more childish fighting and
> back stabbing in
> > this newsgroup than most. If you do not have an answer for
> this person then
> > just pass on by.
> >
> > Barry D.
> >

> >

3190. Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: lscotth@aol.com
Message-ID: <20000925164107.26558.00001961@ng-fi1.aol.com>
Source record: 179546

I'm putting up an old Mosley TA-33. My question is: Can I substitue a 1:1 balun for the coax choke? Will the balun keep RF off the coax as well as the choke does?

Thanks and 73,
Scott - ka0daq

3191. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <HJOz5.5$ai4.29838@news.ntplx.net>
Source record: 179547

Fractenna <fractenna@aol.com> wrote:

> Say, Peter, why don't you tell the folks who you work for and what you
> represent?

It would still not be clear that he is representing his employer in his posts. Employees do have personal opinions. For example, unless I am addressing matters related to the ARRL Lab, Product Review testing, RFI, etc., I am not representing ARRL when I post to newsgroups and reflectors. You are not representing BU, unless you are describing things related to your classroom, etc.

73,
Ed Hare, W1RFI

3192. (none)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: godcandy@msn.COM
Message-ID: <014201c027e8$d62dde00$278d183f@default>
Source record: 179548
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_013C_01C027BE.EA4C1CA0

charset="iso-8859-1"

_____=
____________
Attention!! This is not a scam, this is the real deal--this is money in =
your pocket!
Note: I made the $6 leap of faith and it is paying off big time! You =
should too.
Just read what is below and see for yourself. This will change your =
life:

$6 Investment to make $1000s

: Make A Lot Of Money Fast !!!!!

:=20
: A while back, I was browsing newsgroups, just like you, I came across =
an article similar to this that said you could make thousands of CASH =
within weeks with only an initial investment of $6.00 plus stamps! So I =
thought, "Yeah, right, this must be a scam!" But like most of us I was =
curious and kept reading. It said that if you send $1.00 to each of the =
6 names and addresses listed in the article, you could make thousands in =
a very short period of time. You then place your own name and address at =
the bottom of the list at #6, and post the article to at least 300 =
newsgroups. (There are about 32,000 of them out there and that's quite a =
large market pool). No catch, that was it. Even though the investment =
was a measly $6, I had three questions that needed to be answered before =
I could get involved in this sort of thing.=20

: 1. IS THIS REALLY LEGAL? I called a lawyer first. The lawyer was a =
little sceptical that I would actually make any CASH but he said it WAS =
LEGAL if I wanted to try it. I told him it sounded a lot like a chain =
letter but the details of the system (SEE BELOW) actually made it a =
legitimate legal business.=20

: 2. IS OK WITH THE POST OFFICE OR IS IT MAIL FRAUD? I called them: =
1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See 18, h =
sections1302 NS 1341 of Postal Lottery Laws). This clarifies the program =
of collecting names and addresses for a mailing list.=20

: 3. IS IT RIGHT? Well, everyone who sends me a buck has a good chance =
of getting A LOT of CASH ... a much better chance than buying a lottery =
```

ticket!!! So, having these questions answered, I invested EXACTLY $7.92 =
... six $1.00 bills and six 32 cent postage stamps ... and boy am I glad =
I did!!! Within 7 days, I started getting CASH in the mail! I was =
shocked! I figured it would end soon and didn't give it another thought. =
But the CASH continued coming in. In my first week I made between $20 to =
$30. By the end of the second week I had a made a total of $1,000.00. In =
the third week I had over $10,000.00 and it was still growing. This is =
now my fourth week and I have made a total of just over $42,000 and it's =
still coming in...=20

: It's certainly worth $6.00 and 6 stamps !!! Also, make sure you print =
a copy of this article NOW, so you can get the information off of it as =
you need it. I promise you that if you follow the directions exactly, =
that you will start making more CASH than you thought possible by doing =
something so easy! Suggestion: Read this entire message carefully! =
(print it out or download it.) Follow the simple directions and watch =
the CASH come in! It's easy. It's legal. And, your investment is only =
$6.00 (Plus postage) IMPORTANT: This is not a rip-off; it is not =
indecent; it is not illegal; and it is virtually no risk - it really =
works!!!! If all of the following instructions are adhered to, you will =
receive extraordinary dividends.=20

: PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or =
more can be yours in 20 to 60 days. This program remains successful =
because of the honesty and integrity of the participants. Please =
continue its success by carefully adhering to the instructions. You will =
now become part of the Mail Order business. In this business your =
product is not solid and tangible, it's a service. You are in the =
business of developing Mailing Lists. Many large corporations are happy =
to pay big bucks for quality lists. However, the CASH made from the =
mailing lists is secondary to the income which is made from people like =
you and me asking to be included in that list.=20

: Here are the 4 easy steps to success:=20

: STEP 1: Get 6 separate pieces of paper and write the following on each =
piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 =
bills and place ONE inside EACH of the 6 pieces of paper so the bill =
will not be seen through the envelope (to prevent thievery). Place one =
paper in each of the 6 envelopes and seal them. You should now have 6 =
sealed envelopes, each with a piece of paper stating the above phrase, =
your name and address, and a $1.00 bill. What you are doing is creating =
a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate =
service and you are paying for it! Like most of us I was a little =
skeptical and a little worried about the legal aspects of it all. So I =
checked it out with the U.S. Post Office (1-800-725-2161) and they =
confirmed that it is indeed legal! Mail the 6 envelopes to the following =
addresses:=20

:=20
:=20

: #1) Aditya Venkataraman 14215 Lake Trail Driv Sugar Land, Texas 77478=20

: #2) Charlie Baltimore 71-20 Sutton Place #3 Fresh Meadows, NY 11365=20

: #3) Shaun Littman 3061 Clubhouse Road Merrick, N.Y. 11566=20

: #4) Joseph Morris P.O. Box 37 Union Grove, Al 35175=20

: #5) M. Dixon P.O. Box 767412 Roswell, GA 30076

: #6) Lee Higginbotham 8505 Columbus Ave. #209 North Hills, CA 91343
:=20
: STEP 2: Now take the #1 name off the list that you see above, move the =
other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as =
number 6 on the list. DO NOT JUST COPY OVER THE LAST NAME, BUT REMEMBER =
TO MOVE EACH NAME UP ONE LINE!!!!!!!!=20

: STEP 3: Change anything you need to, but try to keep this article as =
close to original as possible. Now, post your amended article to at =
least 300 newsgroups. (I think there are close to 32,000 groups) All you =
need is 300, but remember, the more you post, the more CASH you make!=20

: This is perfectly legal! If you have any doubts, refer to 18 Sec. 1302 =
& 1341 of the Postal lottery laws. Keep a copy of these steps for =
yourself and, whenever you need CASH, you can use it again, and again.=20

: PLEASE REMEMBER that this program remains successful because of the =
honesty and integrity of the participants and by their carefully =
adhering to the directions. Look at it this way. If you are a person of =
integrity, the program will continue and the CASH that so many others =
have received will come your way.=20

: NOTE: You may want to retain every name and address sent to you, =
either on a computer or hard copy and keep the notes people send you. =
This VERIFIES that you are truly providing a service. (Also, it might be =
a good idea to wrap the $1 bill in dark paper to reduce the risk of mail =
theft.) So, as each post is downloaded and the directions carefully =
followed, six members will be reimbursed for their participation as a =
List Developer with one dollar each. Your name will move up the list so =
that when your name reaches the #1 position you will be receiving =
thousands of DOLLARS in CASH!!! What an opportunity for only $6.00. Send =
it now, add your own name to the bottom of the list and you're in =
business!=20

: ---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS=20

: Step 1) You do not need to re-type this entire letter to do your own =
posting. Simply put your cursor at the beginning of this letter and drag =
your cursor to the bottom of this letter, and select 'copy' from the =
edit menu. This will copy the entire letter into the computer's memory.=20

: Step 2) Open a blank 'notepad' file and place your cursor at the top =
of the blank page. From the 'edit' menu select 'paste'. This will paste =
a copy of the letter into notepad so that you can add your name to the =
list.=20

: Step 3) Save your new notepad file as a .txt file. If you want to do =
your postings in different settings, you'll always have this file to go =
back to.=20

: Step 4) Use Netscape or Internet explorer and try searching for =
various newsgroups (on-line forums, message boards, chat sites, =
discussions.)=20

: Step 5) Visit these message boards and post this article as a new =
message by highlighting the text of this letter and selecting paste from =
the edit menu. Fill in the Subject, this will be the header that =
everyone sees as they scroll through the list of postings in a =
particular group, click the post message button.=20

: You're done with your first one! Congratulations...THAT'S IT! All you =
have to do is jump to different newsgroups and post away, after you get =
the hang of it, it will take about 30 seconds for each newsgroup!=20

: **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE CASH YOU WILL =
MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 300** That's it! You will begin =
receiving CASH from around the world within days! You may eventually =
want to rent a P.O.Box due to the large amount of mail you will receive. =
If you wish to stay anonymous, you can invent a name to use, as long as =
the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE =
CORRECT.**=20

: Now the WHY part:=20

: Out of 300 postings, say I receive only 7 replies (a very low =
example). So then I made $7.00 with my name at #6 on the letter. Now, =
each of the 7 persons who just sent me $1.00 make the MINIMUM 300 =
postings, each with my name at #5 and only 7 persons respond to each of =
the 7 original 7, that is another $49.00 for me, now those 49 each make =
300 MINIMUM posts with my name at #4 and only 7 replies each, I will =
bring in an additional $343.00! Now, those 343 persons turn around and =
post the MINIMUM 300 with my name at #3 and only receive 7 replies each, =
I will make an additional $2401.00! OK, now here is the fun part, each =
of those 2401 persons post a MINIMUM 300 letters with my name at #2 and =
they each only receive 7 replies, that just made me $16,807.00!!! Those =
16807 persons will all deliver this message to 300 newsgroups with my =
name at #1 and if still 7 persons per 300 Newsgroups react I will =
receive $117,649.00! With an original investment of only $6.00! And some =
stamps. AMAZING! When your name is no longer on the list, you just take =
the latest posting in the newsgroups, and send out another $6.00 to =
names on the list, putting your name at number 6 again. And start =
posting again.=20

: The thing to remember is: Thousands of people all over the world are =
joining the internet and reading these articles everyday? JUST LIKE YOU =
are now!! So, can you afford $6.00 and see if it really works?? I think =
so... People have said, "what if the plan is played out and no one sends =
you the CASH? So what! What are the chances of that happening when there =
are tons of new honest users and new honest people who are joining the =

internet and newsgroups everyday and are willing to give it a try? =
Estimates are at 20,000 to 50,000 new users, every day, with thousands =
of those joining the actual internet. Remember, play FAIRLY and HONESTLY =
and this will really work.=20

: ** By the way, if you try to deceive people by posting the messages =
with your name in the list and not sending the CASH to the rest of the =
people already on the list, you will NOT get as much. Someone I talked =
to knew someone who did that and he only made about $150.00, and that's =
after seven or eight weeks! Then he sent the 6 $1.00 bills, people added =
him to their lists, and in 4-5 weeks he had over $10k. This is the =
fairest and most honest way I have ever seen to share the wealth of the =
world without costing anything but our time!!! You also may want to buy =
mailing and e-mail lists for future CASH.=20

: Remember, HONESTY IS THE BEST POLICY. You don't need to cheat, the =
basic idea is to make the CASH!! GOOD LUCK to all and please play fairly =
and reap the huge rewards from this, which is tons of extra CASH. Keep =
an eye on the newsgroups and when the cash has stopped coming (that =
means your name is no longer on the list), you just take the latest =
posting at the newsgroups, send another $6.00 to the names stated on the =
list, make your corrections (put your name at #6) and start posting =
again.=20

: $$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!=20

: GOOD LUCK!!!=20

------=_NextPart_000_013C_01C027BE.EA4C1CA0

charset="iso-8859-1"

----------=

Attention!!=20
This is not a scam, this is the real deal--this is money in your=20
pocket!
Note: I made the $6 leap of faith and it is paying off =
big=20
time! You should too.
Just read what is below and see for=20
yourself. This will change your life:

$6 Investment to make =
$1000s

: Make A Lot Of Money Fast =
!!!!!

:
: A while back, I was browsing =
newsgroups,=20
just like you, I came across an article similar to this that said you =

could make=20
thousands of CASH within weeks with only an initial investment of $6.00 =
plus=20
stamps! So I thought, "Yeah, right, this must be a scam!" But like most =
of us I=20
was curious and kept reading. It said that if you send $1.00 to each of =
the 6=20
names and addresses listed in the article, you could make thousands in a =
very=20
short period of time. You then place your own name and address at the =
bottom of=20
the list at #6, and post the article to at least 300 newsgroups. (There =
are=20
about 32,000 of them out there and that's quite a large market pool). No =
catch,=20
that was it. Even though the investment was a measly $6, I had three =
questions=20
that needed to be answered before I could get involved in this sort of =
thing.=20

: 1. IS THIS REALLY LEGAL? I called a =
lawyer first.=20
The lawyer was a little sceptical that I would actually make any CASH =
but he=20
said it WAS LEGAL if I wanted to try it. I told him it sounded a lot =
like a=20
chain letter but the details of the system (SEE BELOW) actually made it =
a=20
legitimate legal business.

: 2. IS OK WITH THE POST OFFICE OR IS =
IT MAIL=20
FRAUD? I called them: 1-800-725-2161 and they confirmed THIS IS =
ABSOLUTELY=20
LEGAL! (See 18, h sections1302 NS 1341 of Postal Lottery Laws). This =
clarifies=20
the program of collecting names and addresses for a mailing list. =

: 3. IS IT RIGHT? Well, everyone who =
sends me a=20
buck has a good chance of getting A LOT of CASH ... a much better chance =
than=20
buying a lottery ticket!!! So, having these questions answered, I =
invested=20
EXACTLY $7.92 ... six $1.00 bills and six 32 cent postage stamps ... and =
boy am=20
I glad I did!!! Within 7 days, I started getting CASH in the mail! I was =

shocked! I figured it would end soon and didn't give it another thought. =
But the=20
CASH continued coming in. In my first week I made between $20 to $30. By =

the end=20
of the second week I had a made a total of $1,000.00. In the third week =
I had=20
over $10,000.00 and it was still growing. This is now my fourth week and =
I have=20
made a total of just over $42,000 and it's still coming in... =

: It's certainly worth $6.00 and 6 =
stamps !!! Also,=20
make sure you print a copy of this article NOW, so you can get the =
information=20
off of it as you need it. I promise you that if you follow the =
directions=20
exactly, that you will start making more CASH than you thought possible =
by doing=20
something so easy! Suggestion: Read this entire message carefully! =
(print it out=20
or download it.) Follow the simple directions and watch the CASH come =
in! It's=20
easy. It's legal. And, your investment is only $6.00 (Plus postage) =
IMPORTANT:=20
This is not a rip-off; it is not indecent; it is not illegal; and it is=20
virtually no risk - it really works!!!! If all of the following =
instructions are=20
adhered to, you will receive extraordinary dividends.

: PLEASE NOTE: Please follow these =
directions=20
EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program =
remains=20
successful because of the honesty and integrity of the participants. =
Please=20
continue its success by carefully adhering to the instructions. You will =
now=20
become part of the Mail Order business. In this business your product is =
not=20
solid and tangible, it's a service. You are in the business of =
developing=20
Mailing Lists. Many large corporations are happy to pay big bucks for =
quality=20
lists. However, the CASH made from the mailing lists is secondary to the =
income=20
which is made from people like you and me asking to be included in that =
list.=20

: Here are the 4 easy steps to success: =

: STEP 1: Get 6 separate pieces of =
paper and write=20
the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING =
LIST." Now=20

get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper =
so the=20
bill will not be seen through the envelope (to prevent thievery). Place =
one=20
paper in each of the 6 envelopes and seal them. You should now have 6 =
sealed=20
envelopes, each with a piece of paper stating the above phrase, your =
name and=20
address, and a $1.00 bill. What you are doing is creating a service. =
THIS IS=20
ABSOLUTELY LEGAL! You are requesting a legitimate service and you are =
paying for=20
it! Like most of us I was a little skeptical and a little worried about =
the=20
legal aspects of it all. So I checked it out with the U.S. Post Office=20
(1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6=20
envelopes to the following addresses:

:
:

: #1) Aditya Venkataraman 14215 Lake =
Trail Driv=20
Sugar Land, Texas 77478

: #2) Charlie Baltimore 71-20 Sutton =
Place #3 Fresh=20
Meadows, NY 11365

: #3) Shaun Littman 3061 Clubhouse Road =
Merrick,=20
N.Y. 11566

: #4) Joseph Morris P.O. Box 37 Union =
Grove, Al=20
35175

: #5) M. Dixon P.O. Box 767412 Roswell, =
GA=20
30076

: #6) Lee Higginbotham 8505 =
Columbus Ave.=20
#209 North Hills, CA 91343
:
: STEP 2: Now take the #1 name off =
the list=20
that you see above, move the other names up (6 becomes 5, 5 becomes 4, =
etc...)=20
and add YOUR Name as number 6 on the list. DO NOT JUST COPY OVER THE =
LAST NAME,=20
BUT REMEMBER TO MOVE EACH NAME UP ONE LINE!!!!!!!!

: STEP 3: Change anything you need to, =
but try to=20
keep this article as close to original as possible. Now, post your =
amended=20
article to at least 300 newsgroups. (I think there are close to 32,000 =
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All you need is 300, but remember, the more you post, the more CASH you =
make!=20

: This is perfectly legal! If you have =
any doubts,=20
refer to 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy =
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these steps for yourself and, whenever you need CASH, you can use it =
again, and=20
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carefully adhering to the directions. Look at it this way. If you are a =
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of integrity, the program will continue and the CASH that so many others =
have=20
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: NOTE: You may want to retain every =
name and=20
address sent to you, either on a computer or hard copy and keep the =
notes people=20
send you. This VERIFIES that you are truly providing a service. (Also, =
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be a good idea to wrap the $1 bill in dark paper to reduce the risk of =
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followed,=20
six members will be reimbursed for their participation as a List =
Developer with=20
one dollar each. Your name will move up the list so that when your name =
reaches=20
the #1 position you will be receiving thousands of DOLLARS in CASH!!! =
What an=20
opportunity for only $6.00. Send it now, add your own name to the bottom =
of the=20
list and you're in business!

: ---DIRECTIONS ----- FOR HOW TO POST =
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letter to do your own posting. Simply put your cursor at the beginning =

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letter and drag your cursor to the bottom of this letter, and select =
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the edit menu. This will copy the entire letter into the computer's =
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'paste'.=20
This will paste a copy of the letter into notepad so that you can add =
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: Step 3) Save your new notepad file as =
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always have=20
this file to go back to.

: Step 4) Use Netscape or Internet =
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searching for various newsgroups (on-line forums, message boards, chat =
sites,=20
discussions.)

: Step 5) Visit these message boards =
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paste from the edit menu. Fill in the Subject, this will be the header =
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particular group,=20
click the post message button.

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Congratulations...THAT'S IT! All you have to do is jump to different =
newsgroups=20
and post away, after you get the hang of it, it will take about 30 =
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each newsgroup!

: **REMEMBER, THE MORE NEWSGROUPS YOU =
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MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 300** That's =
it! You=20
will begin receiving CASH from around the world within days! You may =
eventually=20
want to rent a P.O.Box due to the large amount of mail you will receive. =
If you=20
wish to stay anonymous, you can invent a name to use, as long as the =

postman=20
will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.** =

: Now the WHY part:

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only 7 replies=20
(a very low example). So then I made $7.00 with my name at #6 on the =
letter.=20
Now, each of the 7 persons who just sent me $1.00 make the MINIMUM 300 =
postings,=20
each with my name at #5 and only 7 persons respond to each of the 7 =
original 7,=20
that is another $49.00 for me, now those 49 each make 300 MINIMUM posts =
with my=20
name at #4 and only 7 replies each, I will bring in an additional =
$343.00! Now,=20
those 343 persons turn around and post the MINIMUM 300 with my name at =
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only receive 7 replies each, I will make an additional $2401.00! OK, now =
here is=20
the fun part, each of those 2401 persons post a MINIMUM 300 letters with =
my name=20
at #2 and they each only receive 7 replies, that just made me =
$16,807.00!!!=20
Those 16807 persons will all deliver this message to 300 newsgroups with =
my name=20
at #1 and if still 7 persons per 300 Newsgroups react I will receive=20
$117,649.00! With an original investment of only $6.00! And some stamps. =

AMAZING! When your name is no longer on the list, you just take the =
latest=20
posting in the newsgroups, and send out another $6.00 to names on the =
list,=20
putting your name at number 6 again. And start posting again. =

: The thing to remember is: Thousands =
of people all=20
over the world are joining the internet and reading these articles =
everyday?=20
JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really =
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newsgroups everyday and are willing to give it a try? Estimates are at =
20,000 to=20
50,000 new users, every day, with thousands of those joining the actual=20

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: ** By the way, if you try to deceive =
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posting the messages with your name in the list and not sending the CASH =
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rest of the people already on the list, you will NOT get as much. =
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after seven or eight weeks! Then he sent the 6 $1.00 bills, people added =
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Keep an eye on the newsgroups and when the cash has stopped coming (that =
means=20
your name is no longer on the list), you just take the latest posting at =
the=20
newsgroups, send another $6.00 to the names stated on the list, make =
your=20
corrections (put your name at #6) and start posting again.

:=20
$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!$$$!!!

: GOOD LUCK!!!

------=_NextPart_000_013C_01C027BE.EA4C1CA0--

3193. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <8qodi6$22c$1@news.service.uci.edu>
Source record: 179549

Fractenna <fractenna@aol.com> wrote in message
news:20000925065631.09047.00000328@ng-ff1.aol.com...
> >Maybe it just means that there is no application for a fractal antenna
> >that is worth publishing?
> >
> >I don't know . . .
> >
> >72/73, George W5YR
>
> You sure don't!
>
> 73
> Chip N1IR

Doug probably didn't either. Maybe he figured the antenna designer and author should come up with the design for the article. Seems reasonable to me.

73, Jim AC6XG

3194. Re: mulit band dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <WROz5.6$ai4.30284@news.ntplx.net>
Source record: 179550

<ka4oww@earthlink.net> wrote in message
news:39caadee.44817071@news.earthlink.net...

> I am planning to build a multiband dipole like the AlpahDelta.
> Is there any reason that I can not feed a
> 40mtr,20mtr,18,mtr,12mtr,10mtr with a single feed line?

This type of multiband technique is one of several discussed at:

http://www.arrl.org/tis/info/pdf/9611073.pdf

In essence, it is possible to put multiple dipoles on different frequencies
in parallel and feed them with a single piece of coax, although there can be
some interaction between the different bands that slightly affects the
tuning and SWR.

73,
Ed Hare, W1RFI

3195. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <8qoev9$2jt$1@news.service.uci.edu>
Source record: 179551

Fractenna <fractenna@aol.com> wrote in message
news:20000925084243.25741.00000791@ng-mg1.aol.com...
> >In August 2000 I went to the egroups site and tried to join the fractal
> >reflector. For at least two weeks, each time I visited the site my
> >membership status was "pending" waiting for approval of the moderator.
This
> >is no lie. Perhaps Chip should check with egroups to make sure that he
> >receives all requests to join.
> >
> >73,
> >Steve VE9SRB
>
>
> I received no such request. I already told you this.
>
> And what is stopping you from trying?

In your last sentence you seem to be implying that Steve is lying about having already made a request to join the list. A status "pending" message would seem to verify the fact that he had asked to be allowed to join. Steve seems to be a genuine, honest, and sincere person. What is the matter with you? What do you enjoy about making enemies of everyone on this newsgroup?

de ac6xg

3196. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CFC314.558A7496@eznec.com>
Source record: 179552

VE9SRB wrote:
> . . .

> I will be quite willing to put up any of my EZNEC files for public
> distribution. I assume that Dr. Cohen will as well. I also assume that you
> will post the files when they are ALL available.

I'll post them under whatever conditions the sender requests. If you don't want yours posted until I get one from Chip, let me know when you submit it, and I'll honor that.

In fairness, though, I think it's appropriate for me to post on the newsgroup when I've received a file, from whom, and what the restrictions are on posting it, if any. So I'll do that.

Roy Lewallen, W7EL

3197. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925171755.16270.00001488@ng-cg1.aol.com>
Source record: 179553

>
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20000925084243.25741.00000791@ng-mg1.aol.com...
>> >In August 2000 I went to the egroups site and tried to join the fractal
>> >reflector. For at least two weeks, each time I visited the site my
>> >membership status was "pending" waiting for approval of the moderator.
>This
>> >is no lie. Perhaps Chip should check with egroups to make sure that he
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>> >73,
>> >Steve VE9SRB
>>
>>
>> I received no such request. I already told you this.
>>
>> And what is stopping you from trying?
>
>In your last sentence you seem to be implying that Steve is lying about
>having already made a request to join the list. A status "pending" message
>would seem to verify the fact that he had asked to be allowed to join.
>Steve seems to be a genuine, honest, and sincere person. What is the matter
>with you? What do you enjoy about making enemies of everyone on this
>newsgroup?
>
>de ac6xg
>

I received no such request. I already told you this.

And what is stopping you from trying?

73
Chip N1IR

3198. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cfc1cc.42883835@news.akorn.net>
Source record: 179554

On Mon, 25 Sep 2000 09:25:31 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>This is true, and something I hadn't considered either. A little
>experimentation would answer the valid question you raise. But if I were
>he, I'd find out why I'm not hearing anyone before spending any more
>time fussing with the SWR.
>
>Roy Lewallen, W7EL

He may not be hearing anyone because he is on six meters. At least
that's what I thought he said.

I have a stack of yagis up 150 feet, and often can listen for days
without hearing anyone. Then the band opens, it is full of twenty or
more stations, and then poof! Dead again for what amounts to a long
while at times.

Sometime soon, or sometime weeks later, I hear the same stations on
another opening.

Six meters is a great band to grow a beard on, while waiting for
signals.

73 Tom

3199. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CFC49D.31D45280@eznec.com>
Source record: 179555

I'm a former TV repairman myself. Dunno how where former radio repairmen fit on the social status, but Howard Vollum, cofounder of Tektronix, was also a former radio repairman. I'm sure it wouldn't take much looking to find a long list of well respected, even prominent scientists and engineers who once kept food on the table this way.

I wouldn't get too upset by this. Are you upset when a two year old calls you "poopy"? Same thing.

Roy Lewallen, W7EL

ehsjr@bellatlantic.net wrote:
>
> Fractenna wrote:
>
> > Tom, as (you are) a former TV repairman, I am curious to know what skill set
> > you bring to the table to act in such a capacity.
>
> What in the hell does a person being a former anything have to do with
> one's present capability in a different area?
>
> Does the fact that you were a former undeucated child mean that you
> are now an uneducated man? Your suggested "logic" is utterly bizzare.
> I find it offensive that you attempt to denigrate others so often. I find
> it offensive that you imply that TV repairmen (current or former) are
> intellectually inferior. I find your constant attacks on Tom repugnant.
> Such behaviour is abominable.
>
> And the kicker is that Tom has demonstrated a considerable and
> extensive knowledge and undertsanding of antennas on this NG,
> which you cannot match. You are not even capable of recognizing
> the fact.
>
> Your mind is closed.

3200. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39CFC4E4.1AF9E5A5@mindspring.com>
Source record: 179556

Tom W8JI wrote:

> On Mon, 25 Sep 2000 09:25:31 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >This is true, and something I hadn't considered either. A little
> >experimentation would answer the valid question you raise. But if I were
> >he, I'd find out why I'm not hearing anyone before spending any more
> >time fussing with the SWR.
> >
> >Roy Lewallen, W7EL
>
> He may not be hearing anyone because he is on six meters. At least
> that's what I thought he said.
>
> I have a stack of yagis up 150 feet, and often can listen for days
> without hearing anyone. Then the band opens, it is full of twenty or
> more stations, and then poof! Dead again for what amounts to a long
> while at times.
>
> Sometime soon, or sometime weeks later, I hear the same stations on
> another opening.
>
> Six meters is a great band to grow a beard on, while waiting for
> signals.
>
> 73 Tom

Ok. Yes it is a MFJ 9406 6-meter ssb radio. The static changes every once
in a while so I don't think the radio is dead. :-)
Just don't hear anybody talking or even CW. Someone give a shout when the
band opens up would ya? I'll keep trying but if it opens and I still don't
hear anything..... well then I guess I'll try a different antenna position
and see if that is the problem.

3201. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cfc51c.43731324@news.akorn.net>
Source record: 179557

On 25 Sep 2000 21:17:55 GMT, fractenna@aol.com (Fractenna) wrote:

> I received no such request. I already told you this.
>
> And what is stopping you from trying?
>
>73
>Chip N1IR

Just an observation:

Chip has an established history of making "less than straight forward" statements.

As far as I have seen, Steve Best is direct and to the point.

Where is the file Chip? Post your file, your word isn't good enough.

73 Tom

3202. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CFC836.E86A5A6A@oio.net>
Source record: 179558

LScottH wrote:
>
> I'm putting up an old Mosley TA-33. My question is: Can I substitue a 1:1 balun
> for the coax choke? Will the balun keep RF off the coax as well as the choke
> does?
>
> Thanks and 73,
> Scott - ka0daq

Do what Mosley recomends...
'Doc

3203. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CFCAA0.364C@wt.net>
Source record: 179559

Roy Lewallen wrote:
>
> This is true, and something I hadn't considered either. A little
> experimentation would answer the valid question you raise. But if I were
> he, I'd find out why I'm not hearing anyone before spending any more
> time fussing with the SWR.
>
> Roy Lewallen, W7EL

Actually, I kinda suspect the band is dead where he is, unless he knows otherwise. I have a couple of friends here in town who are in the process of getting active on 6m. They say there is little activity in general even here in the big town of Houston. I'd try it myself, but I don't have a rig for 6m. "I'm considering buying a new radio before too long, and may get a 706mk2g that has 6m" but haven't yet. As far as the match being 1.8 to 1, and limiting usuable bandwidth, thats fairly common, and I think could be cured by just shifting the center point of the antenna a tad until he gets a better match. Should be able to get it 1:1 with a little tweaking. I've done this many times on other dipoles.
MK
--
http://web.wt.net/~nm5k

3204. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CFC98A.EB7E289D@hiwaay.net>
Source record: 179560

I agree with the "beard" statement, but, even though I already have the
beard, I sit and listen to 50.125 when I am just keyboard pounding. When
it opens, I can get out fine, all up the band. When its dead- all I get
is computer chirps.

Try the area down in the 50.6 region- there are some beacons there.

Bill-W4BSG

Tom W8JI wrote:
>
> On Mon, 25 Sep 2000 09:25:31 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >This is true, and something I hadn't considered either. A little
> >experimentation would answer the valid question you raise. But if I were
> >he, I'd find out why I'm not hearing anyone before spending any more
> >time fussing with the SWR.
> >
> >Roy Lewallen, W7EL
>
> He may not be hearing anyone because he is on six meters. At least
> that's what I thought he said.
>
> I have a stack of yagis up 150 feet, and often can listen for days
> without hearing anyone. Then the band opens, it is full of twenty or
> more stations, and then poof! Dead again for what amounts to a long
> while at times.
>
> Sometime soon, or sometime weeks later, I hear the same stations on
> another opening.
>
> Six meters is a great band to grow a beard on, while waiting for
> signals.
>
> 73 Tom

3205. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8qohjc$q73$1@slb3.atl.mindspring.net>
Source record: 179561

And anyone with common sense knows that. But by now, anyone who has been around for a year or so, knows that the Frac crew has ulterior motives and can predict their behavior almost to the minute. It is standard procedure with them to attempt intimidation and embarrassment to anyone that might ask questions and require explanations which they cannot, or will not, produce. Changing the subject or direction of a thread is very common practice with them.

Dean Craft -- W4IHK

Ed Hare, W1RFI wrote in message ...
>Fractenna <fractenna@aol.com> wrote:
>
>> Say, Peter, why don't you tell the folks who you work for and what you
>> represent?
>
>It would still not be clear that he is representing his employer in his
>posts. Employees do have personal opinions. For example, unless I am
>addressing matters related to the ARRL Lab, Product Review testing, RFI,
>etc., I am not representing ARRL when I post to newsgroups and reflectors.
>You are not representing BU, unless you are describing things related to
>your classroom, etc.
>
>73,
>Ed Hare, W1RFI
>
>

3206. Re: new antenna help OOPS !

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CFCB94.28D26C70@hiwaay.net>
Source record: 179562

Sorry- I meant 50.06, of course.

Bill Aycock wrote:
>
> I agree with the "beard" statement, but, even though I already have the
> beard, I sit and listen to 50.125 when I am just keyboard pounding. When
> it opens, I can get out fine, all up the band. When its dead- all I get
> is computer chirps.
>
> Try the area down in the 50.6 region- there are some beacons there.
>
> Bill-W4BSG
>
> Tom W8JI wrote:
> >
> > On Mon, 25 Sep 2000 09:25:31 -0700, Roy Lewallen <w7el@eznec.com>
> > wrote:
> >
> > >This is true, and something I hadn't considered either. A little
> > >experimentation would answer the valid question you raise. But if I were
> > >he, I'd find out why I'm not hearing anyone before spending any more
> > >time fussing with the SWR.
> > >
> > >Roy Lewallen, W7EL
> >
> > He may not be hearing anyone because he is on six meters. At least
> > that's what I thought he said.
> >
> > I have a stack of yagis up 150 feet, and often can listen for days
> > without hearing anyone. Then the band opens, it is full of twenty or
> > more stations, and then poof! Dead again for what amounts to a long
> > while at times.
> >
> > Sometime soon, or sometime weeks later, I hear the same stations on
> > another opening.
> >
> > Six meters is a great band to grow a beard on, while waiting for
> > signals.
> >
> > 73 Tom

3207. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CFCC2F.4305@wt.net>
Source record: 179563

Roy Lewallen wrote:
>
> That's the way my homebrew rig works, since it only monitors forward
> power. The Icom is smarter, increases the forward power as necessary to
> keep the net at 100 watts.
>
> Roy Lewallen, W7EL

I also have a IC-730. It's not picky at all on the swr. I've had it
near 2:1 many times with very little cutback of power. "Maybe 10-15%
tops". You have to get over 2:1 to start really seeing a big cutback on
power. MK
--
http://web.wt.net/~nm5k

3208. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <r4Qz5.7$ai4.35246@news.ntplx.net>
Source record: 179564

Roy Lewallen <w7el@eznec.com> wrote:

> I'm a former TV repairman myself. Dunno how where former radio repairmen
> fit on the social status, but Howard Vollum, cofounder of Tektronix, was
> also a former radio repairman. I'm sure it wouldn't take much looking to
> find a long list of well respected, even prominent scientists and
> engineers who once kept food on the table this way.

Well, I am not a prominent scientist, but now that someone as respected as you, Roy, has removed the stigma from being a former TV repairman, I, too, will come out of the closet. :-)

Okay, now, former TV repairman to TV repairman, let's test how much you remember. A customer brings in a TV set for repair. You turn it on and there is a diagonal line from the upper left corner of the screen to the lower right corner of the screen. What is the defect?

73,
Ed Hare, W1RFI

3209. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <4dQz5.9$ai4.35774@news.ntplx.net>
Source record: 179565

Fractenna <fractenna@aol.com> wrote:

> Speaking of closed, you may be interested to know that Doug Smith could not
> provide a suggested fractal antenna design. Therefore I will not aid the ARRL
> in any planned fractal antenna articles.

Are you really saying that you are not going to write the article because the magazine editor would not design the antenna for you? Doug's expertise is not in antenna design.

Too bad; I was looking forward to reading the article.

73,
Ed Hare, W1RFI

3210. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CFCE57.BAA448D0@hiwaay.net>
Source record: 179566

Sideband- in another post, you asked to be informed if the band opens-
there are two mailing lists (at least) that are dedicated to 6M. People
frequently post about openings, and, of course, there is a lot of other
info there.

The lists are both called "50mhz",and both use the Majordomo system.

sent a post to :
Majordomo@qth.net
with the body saying subscribe 50mhz

send another post to:
majordomo@6mt.com
with the body saying subscribe 50mhz

Both will pick up your address from the message, send you a request for
confirmation, and then a "welcome" post.

Try it, you'll like it

Good luck- Bill

3211. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Z9Qz5.8$ai4.35414@news.ntplx.net>
Source record: 179567

Fractenna <fractenna@aol.com> wrote:

> No; if it was a problem that persisted for more than a few minutes I would call
> the FCC directly. I presume they can localize in just a couple of minutes.

> Why does this need to go through the ARRL?

It does not need to go through the ARRL, Chip.

Let us know how the FCC call turns out.

73,
Ed Hare, W1RFI

3212. Ham 2 Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: joe Sartori <jsartori@arrl.net>
Message-ID: <DaQz5.14595$u6.538141@typhoon1.ba-dsg.net>
Source record: 179568

Does anyone have a manual or wiring diagram for the HAM II rotator???

Thanks

Joe
WB3IUT

3213. Re: Need source for aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000925072713.03594.00000319@ng-cr1.aol.com>
Source record: 179569

>From: "Bill" bill@hovac.com

>Does any have some good sources for different size aluminum tubing?

Go to:

http://www.arrl.org/tis/tisfind.html

and scroll down to Antenna/Aluminum tubing.

http://www.arrl.org/cgi-bin/tisfind?case=on&patt=ANTENNA%3eALUMINUM+TUBING

73,
Ed Hare, W1RFI

3214. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000925075514.05666.00000756@ng-co1.aol.com>
Source record: 179570

>
>Say, Peter, why don't you tell the folks who you work for and what you
>represent?
>
>Cordially,
>
>Nathan Cohen, Ph.D.
>

Amusing to see sane people "argue" with Mï¿½RON.
Join the self help group.

3215. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf3c0f.8643883@news.akorn.net>
Source record: 179571

On 25 Sep 2000 11:27:12 GMT, fractenna@aol.com (Fractenna) wrote:

>Hi Ed--
>
>Are you implying that Dean Straw was part of the assessment in my QST
>submission (of the first fractal antenna manuscript) which the ARRL categorized
>as an "April Fool's joke?"
>
>I don't think so.
>
>73
>Chip N1IR

Ed,

Reviewing articles can be headaches for the reviewer.

I've had a running problem with one author after I reviewed some of
his articles and pointed out they took several pages to say what could
be said in one or two sentences.

The one or two sentences were:

"Sometime some fractal shapes work better than other shapes in some
antennas, sometimes they don't"

"At times a fractal shape has one or more characteristics that are
useful"

In dozens of pages, the articles never explained WHY they sometimes
work and sometimes don't, or when you should use them.

One article described how a network analyzer was used to make
measurements of a rock wrapped with aluminun foil. Another claimed a
regular old tree made a great two meter antenna because the branches
are "fractal shaped", and described how the trunk could be excited by
driving a nail into the tree and worked against a ground rod.

I formed the opinion some articles were indeed Fool's Articles, that
missed the April issues. It's interesting to see someone else who I
don't know reached the same conclusion about later articles.

The author would be better off to consider the years-apart reviews
that concluded the articles were technical jokes meaningful and use
the identical conclusions the articles to improve his technical style,
rather than consider it an error or attack by the reviewers.

73 Tom

3216. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf40fa.9902760@news.akorn.net>
Source record: 179572

On 25 Sep 2000 02:22:08 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>>From: ehsjr@bellatlantic.net
>>
>>>I think this is just one more example of poor communication
>>>from Fractenna, after reading it over several times carefully.
>>
>>I think all of us have written words that can be taken a different way than
>>we
>>intended; Chip clarified it in a followup post; the clarification was pretty
>>clear.
>>
>>73,
>>Ed Hare, W1RFI
>>
>
>
>Excuse me;
>
>I did not clarify. I provided additional information. There is no room for
>ambiguity in the original post. If you read it wrong, don't blame me.
>
>NC

The nice thing about Chip, NC, and the rest at Fractenna is even if
you take their side and defend them ....they will still turn around
and disagree with you.

73 Tom

3217. Re: BOYCOTT Contest call K3BU!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf4190.10052896@news.akorn.net>
Source record: 179573

On Sun, 24 Sep 2000 17:04:48 -0700, Jim Pennino
<jimp@mail.specsol.com> wrote:

>Fractenna <fractenna@aol.com> wrote:
>
><snip>
>
>> I don't have any buddies who go hunting or fishing for the weekends.
>
><rest snipped>
>
>If you were to find some, it just might improve your personality.
>
>Though on second thought, with your personality as it is, it probably wouldn't
>be wise to try to associate with people that own gutting knives and
>firearms.
>
>Jim Pennino

Death threat!!! Call the FBI Chip!

3218. HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925081819.25741.00000784@ng-mg1.aol.com>
Source record: 179574

In a major shift in its position, the ARRL has made a policy decision to run a fractal antenna article in QEX (an ARRL publication), according to Doug Smith, editor.

In the past, the ARRL has called the submission of a fractal antenna MS "an April Fool's joke" and has not published any fractal antenna articles in its publications, since this original submission in February 1994.

The author is known to many on this NG.

I will be happy to publicly critique said article, just as I have in the past, on the ham page web site reviewing other fractal antenna articles for hams. This site gets over 4000--7000 different vsiitors, on average, a month. This is approximately the same number of subscribers as found in QEX.

There are some details to be worked out regarding intellectual property. Still, it is important to realize that the ARRL has REVERSED its policy decision--which effectively attempted to prevent this important new technology from being accessed informationally by its members.

Perhaps you may wish to let Doug know your feelings on this matter. His e-mail is:

dsmith@sedona.net

It's good to see our League opening it's eyes to new technologies!

73!
Chip N1IR

3219. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925082015.25741.00000785@ng-mg1.aol.com>
Source record: 179575

>
>On 25 Sep 2000 02:22:08 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>>
>>>>From: ehsjr@bellatlantic.net
>>>
>>>>I think this is just one more example of poor communication
>>>>from Fractenna, after reading it over several times carefully.
>>>
>>>I think all of us have written words that can be taken a different way than
>>>we
>>>intended; Chip clarified it in a followup post; the clarification was
>pretty
>>>clear.
>>>
>>>73,
>>>Ed Hare, W1RFI
>>>
>>
>>
>>Excuse me;
>>
>>I did not clarify. I provided additional information. There is no room for
>>ambiguity in the original post. If you read it wrong, don't blame me.
>>
>>NC
>
>The nice thing about Chip, NC, and the rest at Fractenna is even if
>you take their side and defend them ....they will still turn around
>and disagree with you.
>
>73 Tom
>

Hi Tom,

Could you kindly show where my statement was wrong? If you re-post, for all to see, you will find that I did not attack anyone for taking a side, but for stressing the need to understand the original statement.

Please clarify as an annotationn if you do not agree with this.

Thanks!

Chip N1IR

3220. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <HwHz5.5269$6T.447865@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179576

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924213645.14996.00000639@ng-cb1.aol.com...
> >After 2 - 3 weeks of "membership pending" status, I gave up on
> >that.
>
> I, as moderator have NEVER RECEIVED a request from Steve Best to join the
> fractal antenna reflector.
>
> This is simply a prevarication.
>
> Why Best would lie on this is beyond me.Perthaps he can best explain.
>
> Nathan Cohen, Ph.D.
>
>

In August 2000 I went to the egroups site and tried to join the fractal reflector. For at least two weeks, each time I visited the site my membership status was "pending" waiting for approval of the moderator. This is no lie. Perhaps Chip should check with egroups to make sure that he receives all requests to join.

73,
Steve VE9SRB

3221. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39CF2E63.E76469BC@GTE.net>
Source record: 179577

Phillip Sikes wrote:

> Hello to the group. I have been looking at the Radio Works Super Loop
> 80 and was wondering if anyone has had any experience with the
> antenna. My main interest is using it for 80M DXing so don't care too
> much about the other bands and how they react.
>
> 73 - Phil
> N7UX

Hi Phil,

Is this a 1 wavelength loop? If so, a 1 wave loop has slightly less gain than a dipole- nearly identical pattern and at least when I modeled it, the BW was a little less than a dipole. Given that, I would go with a dipole.

Dale W4OP

3222. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <OyHz5.5270$6T.449127@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179578

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924221311.14996.00000641@ng-cb1.aol.com...
> Steve Best said:
>
> >I push the discussion because I just have a bit of an issue
> >with someone claiming that they've "seen it all" or that they are "years
> >ahead of everyone else in the IP department
>
> I too think we need to push the discussion, especially as Mr. Best has
said of
> me:
>
> " In my opinion, you demonstrate a total lack of moral character."
>
>
> For the record, those of us who have been in New England for a while know
the
> owner of Cushcraft and have a fair to great amount of respect for him. He
has
> always done well by and for hams, in particular. I have a great deal of
respect
> for the company as a whole. However-- founders are not necessarily setting
the
> same corporate cultures as management.
>
> Steve Best is President of Cushcraft Antennas and a equity position holder
in
> this private firm.
>
> His firm, and my firm (Fractal Antenna Systems, Inc.) compete for
customers in
> the exploding wireless markets (non-amateur). Cushcraft does not hold
patents
> on new antenna technologies in this market and hence, as with other
> competitors, is at risk should a disruptive technology infringe on market
> share.(A publicly accessible review of their patents will show that, in
a 20
> year period, only 2 patents--extending the known Yagi array
technology--were
> issued to the company. In all fairness, this does not indicate an absence
of
> future patents but does indicate a general historical absence of
innovative
> IP-held development).

>
> Best is thus not an impartial observer in commenting about issues of IP,
the
> relative 'value' of antenna designs, and so on. He has a concerted stake
in
> assurring that Cushcraft attains a secure market share in the wireless
markets,
> despite competitor's innovations.
>
> The issue of Fractal's IP was, and perhaps is, of interest to Cushcraft.
Two
> years ago, I was called (unsolicited) by Marcos Rosenbaum, who talked with
me
> for an hour on the phone, trying to find out everything he could about
> Fractal's patent positions. Although I was cordial and provided
SUFFICIENT
> SCIENTIFIC INFORMATION--as I do for any colleague in that context, I did
not
> provide anything not publicly available. I advised him to arrange a
meeting
> with Mr. Best: we could 'do lunch' and discuss how to take the
conversation
> further. When I did not hear from Mr. Rosenbaum I called him several weeks
> later, with no return call.
>
> At this time there were rumors floating that Fractal would not receive any
> patents and, just as now, the usual junk-debunkers contending it did not
> provide any advantages. I am not implying that Cushcraft was responsible
for
> such rumors; I am merely pointing out that the timing for suddenly being
> 'uninterested' is itself an interesting coincidence.
>
> Now: look when Steve Best suddenly shows up to evince some interest. Go
look at
> his posting record, and then look at the dates when Fractal announced that
its
> first patent would issue. Again, an interesting coincidence.
>
> The fact of the matter is that random fractals--as well as deterministic
one--
> have already demonstrated optimum electrical performance. This is nothing
new:
> see Landstorfer and Sacher for an early and historical taste of this. In
> addition, in the cases where optimum means 'frequency independent',
Hohlfeld
> and Cohen made the clinching case for this for the relevant class of
fractals,
> in 1999. This was written up widely in the press, including Scientific
American
> in July 1999.

> In other words, Best wants us to ignore the past; ignore realities; and cater
> to his not so objectively defined interest in this subject.
>
> Here are the facts:
>
> 1) Best tried to 'better' the MI2 design with a helical one, using 5 inch
> diamter(!!!) tubing. A 3D design (so much for the rules)
> 2) Best claims to have a 'random' design that works as well, yet has not and
> apparently will not, provide the file that he offered publicly on this NG.
> 3) Best claims to have an "(almost)2D" loop which works better than MI2. Again;
> so much for the rules.
> 4) Best claims that the 'small loop performance is SOLEY DO to the length of
> wire used and x and y axis symmetry', a clearly incorrect assessment.
>
> It is time for Mr. Best to act like a scientist and stop diverting the issue.
> If he has something then show us. As I scientist I will respond, in praise, or
> critique, or in helpful suggestion.
>
> Where, Mr. Best, is the FILE? At this point I WILL NOT help him in any way
> until he backs up his claims, by providing the file to those who requested it.
>
> Nathan Cohen, Ph.D.

This is the most bizarre post I have ever seen. It is unrelated to the subject matter, unnecessary and unprofessional.

Chip: Unless you recant these statement and apologize, I will print out copies of all your bizzare posts and forward them to the appropriate people at BU.

73,
Steve VE9SRB

3223. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf4328.10461328@news.akorn.net>
Source record: 179579

On 25 Sep 2000 02:27:51 GMT, fractenna@aol.com (Fractenna) wrote:

>>Hey Chip, don't avoid the issue--show us your file! What kind of chickenshit
>>behavior is this???? Do I need a mop to wipe the teardrops off the deck?
>>
>>Rick K1BQT
>
>
>Which file?
>
>73
>Chip N1IR

I'd like to see Chip's file. I'll bet it is a bastard, or perhaps a
half-round rasp.

73 Tom

3224. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf44bb.10864623@news.akorn.net>
Source record: 179580

On 25 Sep 2000 00:53:35 GMT, fractenna@aol.com (Fractenna) wrote:

>Perhaps someone can fill me in though: why is there such a reluctance in
>calling a tornado a tornado? Is there some LEGAL/INSURANCE distinction?
>
>Apparently the NWS misses over 90% of F1 tornadoes.

>73
>Chip N1IR

I'm a little confused here Chip.

Are you saying the NWS missed calling the F1 tornado that your antenna survived an F1 tornado, because they are reluctant to call 90% of tornados by name for insurance reasons??

Of course we all believe you. With your established track history of being truthful and clear why wouldn't we??

73 Tom

3225. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925083922.25741.00000787@ng-mg1.aol.com>
Source record: 179581

>
>On 25 Sep 2000 11:27:12 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>Hi Ed--
>>
>>Are you implying that Dean Straw was part of the assessment in my QST
>>submission (of the first fractal antenna manuscript) which the ARRL
>categorized
>>as an "April Fool's joke?"
>>
>>I don't think so.
>>
>>73
>>Chip N1IR
>
>Ed,
>
>Reviewing articles can be headaches for the reviewer.
>
>I've had a running problem with one author after I reviewed some of
>his articles and pointed out they took several pages to say what could
>be said in one or two sentences.
>

Tom, as (you are) a former TV repairman, I am curious to know what skill set you bring to the table to act in such a capacity.

>The one or two sentences were:
>
>"Sometime some fractal shapes work better than other shapes in some
>antennas, sometimes they don't"
>
>"At times a fractal shape has one or more characteristics that are
>useful"

Could you please give us the reference? If this is a copyright article , held by Fractal Antenna Systems, Inc., I give you permission to quote it here.

>
>In dozens of pages, the articles never explained WHY they sometimes
>work and sometimes don't, or when you should use them.
>

Which articles?

>One article described how a network analyzer was used to make
>measurements of a rock wrapped with aluminun foil.

Ah yes!

I am very proud of that, although your statement is incorrect.

The rock was a pyrite block of fractal structure. I used to it show that Liu's article from 1985 Physical Review Letters--in which he states that the admittance of fractal shapes should be broad band-- had a confirmed experimental basis.

Broad band vibrational fractal characteristics have been explored anayltically by Michel Lapidus at UC Irvine, and several others in Europe. No one has yet succeeded in forming a general anaytical expression for the complex impedance of a fractal, for example.

Try it yourself on something EZ. Find an equation for the impedance of these three structures (as a function of frequency):

```
______________X_______________

___________X____________
I
I
_______I

_________X_____
I I
I I
_______I I__________
```

You get the idea. Move the feedpoint if you want.

Incidentally, I displayed the return loss data for the pyrite and its covered self at the 1996 IEEE APS /URSI Meeting , to great interest from the audience. They understood that the SHAPE, not the VOLUME was rsonsible for the radically different characetristics of return loss.

Could you be so kind as to suggest a different methodology as to how one can test for different return loss characteristics for a fractal volume and its complemental smooth one? I would be very interested in what your TV repair experience might bring to the table on this. I am always interested in learning new things!

Another claimed a
>regular old tree made a great two meter antenna because the branches
>are "fractal shaped", and described how the trunk could be excited by
>driving a nail into the tree and worked against a ground rod.

Could you please quote from said article and share with us?

>
>I formed the opinion some articles were indeed Fool's Articles, that
>missed the April issues. It's interesting to see someone else who I
>don't know reached the same conclusion about later articles.

>

I think it is a pity that ham radio has chosen to use reviewers--or so you claim-- that are competent technicians (such as TV repair) but not antenna engineers with defineable track records.

>The author would be better off to consider the years-apart reviews
>that concluded the articles were technical jokes meaningful and use
>the identical conclusions the articles to improve his technical style,
>rather than consider it an error or attack by the reviewers.
>

Well, I do find your assessments at fault. But I think that great value may be gleaned by your posting all the actual stections you refer to so we can see to what degree they are true.

What's stopping you?

BTW, I am having problem with the upstairs TV. The A/B configuration has a lower sig than the main one. Knowing your expertise on this, could you kindly suggest a best way to fix?

73
Chip n1IR

>73 Tom
>

3226. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CF477A.9CDCC4A9@hiwaay.net>
Source record: 179582

CHips reading skills and memory are pitiful- I never said anything about
the patent, and only asked for the antenna file, and I did that only on
his list.

His time memory is faulty also- he implies I asked AFTER I was banned-
it was really about a week before.

I hope this helps

Bill-W4BSG

Fractenna wrote:
>
> >
> >The NG should be aware that this offer is a lie. He offered the EZNEC
> >file for one of his antennas to the group (yep- public offer) under the
> >same set-up- ie, join his private list.
> >
> >I did just that, and found a post that said to ask Chip, directly. I
> >did. Chip answered, said he would send the file, in "a couple of days".
> >
> >After four days, I sent him a query-(on his list)- no answer. Knowing he
> >monitored this NG, I asked him the same question, here- ie, did he
> >forget to send it to me?)
> >
> >HIs response was to ban me from the list- tell me I would NEVER get the
> >file- the reason being that I had posted an offer for him (chip) to
> >provide the file, to THE WHOLE WORLD !!. Another Chipper lie.
> >
> >He was the one that made the offe, not me- He was apparently looking for
> >an excuse to ban me, but he picked a silly one, with no truth.
> >
> >However- I am not asking back on his list- nor do I need his file- I
> >have no respect for his censored (heavily, by him)list, or him, and I
> >got a very usable copy elsewhere. All the shotcomings of the antenna,
> >found by others, proved to be true.
> >
> >I hope this helps.
> >
> >Bill-W4BSG
> >
> >Fractenna wrote:
> >>
> >> Hi Steve--
> >>

> >> I am still awaiting the file you publicly offered on this NG.
> >>
> >> I will also remind you (again) that MI2 and other fractal antenna files are
> >> available to members of the fractal antenna list.
> >>
> >> Again, to remind on joining, do:
> >>
> >> fractalantenna-subscribe@egroups.com
> >>
> >> 73
> >> Chip N1IR
> >
>
> You did indeed make that request, but as you were banned that wasn't a terribly
> appropriate thing to do!
>
> You don't habd out reading assignments to a student who has been expelled..
>
> Now: Bill Aycock was banned from the list because he took a private list post,
> inwhich I made an offer to send copies of the latest fractal antenna patent to
> list members ONLY--and re-transmitted it on this public and global
> medium--without any publication of the caveat.
>
> I actually DID get some people who requested the patent who are not members of
> the list but readers here. This despite my effort to fix afetr Bill messed it
> up.
>
> Nope; Bill was not banned because of an EZNEC file. He was banned for
> misrepresentation.
>
> 73
> Chip N1IR

3227. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf45ee.11171178@news.akorn.net>
Source record: 179583

On 25 Sep 2000 01:37:16 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: fractenna@aol.com (Fractenna)
>
>>BTW Rick, any idea who the idiots were who QRM'ed me this morning? I am not
>>assuming it was you.
>
>Maybe someone was telling you that the frequency was closed.
>
>73,
>Ed Hare, W1RFI

Actually Ed, from reading the newsgroup, it appears what Chip is complaining about is this. Someone told Chip his voice was changing pitch or he was speaking too fast when he was calling CQ's.

Chip thinks the FCC should be called to DF the bum who said that, and throw him in jail!

Hope this helps.

73 Tom

3228. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925084116.25741.00000788@ng-mg1.aol.com>
Source record: 179584

>
>On 25 Sep 2000 00:53:35 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>Perhaps someone can fill me in though: why is there such a reluctance in
>>calling a tornado a tornado? Is there some LEGAL/INSURANCE distinction?
>>
>>Apparently the NWS misses over 90% of F1 tornadoes.
>
>>73
>>Chip N1IR
>
>I'm a little confused here Chip.
>
>Are you saying the NWS missed calling the F1 tornado that your antenna
>survived an F1 tornado, because they are reluctant to call 90% of
>tornados by name for insurance reasons??
>
>Of course we all believe you. With your established track history of
>being truthful and clear why wouldn't we??
>
>73 Tom
>

I am asking what the big hangup is between calling wind damage a 'confirmed tornado' or not. Is there some clause in insurance policies which does not normally cover tornado damage?

Can you fill us in? What does your policy say?

Hope this helps.

73
Chip n1IR

3229. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925084157.25741.00000790@ng-mg1.aol.com>
Source record: 179585

>I'd like to see Chip's file. I'll bet it is a bastard, or perhaps a
>half-round rasp.
>
>73 Tom
>

Which one? Why do you want to see it?

73
Chip N1IR

3230. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925084243.25741.00000791@ng-mg1.aol.com>
Source record: 179586

>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000924213645.14996.00000639@ng-cb1.aol.com...
>> >After 2 - 3 weeks of "membership pending" status, I gave up on
>> >that.
>>
>> I, as moderator have NEVER RECEIVED a request from Steve Best to join the
>> fractal antenna reflector.
>>
>> This is simply a prevarication.
>>
>> Why Best would lie on this is beyond me.Perthaps he can best explain.
>>
>> Nathan Cohen, Ph.D.
>>
>>
>
>In August 2000 I went to the egroups site and tried to join the fractal
>reflector. For at least two weeks, each time I visited the site my
>membership status was "pending" waiting for approval of the moderator. This
>is no lie. Perhaps Chip should check with egroups to make sure that he
>receives all requests to join.
>
>73,
>Steve VE9SRB

I received no such request. I already told you this.

And what is stopping you from trying?

NC

3231. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925084524.25741.00000792@ng-mg1.aol.com>
Source record: 179587

>Actually Ed, from reading the newsgroup, it appears what Chip is
>complaining about is this. Someone told Chip his voice was changing
>pitch or he was speaking too fast when he was calling CQ's.
>
>Chip thinks the FCC should be called to DF the bum who said that, and
>throw him in jail!
>
>Hope this helps.
>
>73 Tom
>
>

No; the malicious interefernce consisted of fould languiage, carriers;
'uhhhhhhh' and so on.

Do you know anything about it?

73
Chip n1IR

3232. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39cf4783.11576586@news.akorn.net>
Source record: 179588

On 25 Sep 2000 00:50:41 GMT, fractenna@aol.com (Fractenna) wrote:

>Well,
>
>Operating skill also has someting to do with it.

Translation:

I am mister Oooo La la! The world revolves around
me, I am the best at everything.

3233. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CF4982.8EB1C8B8@hiwaay.net>
Source record: 179589

Chip- It is NOT 4000-7000 visitors- and you know it- it's that many "hits", and the faulty (?) counter on that site registers a hit everytime you select a different internal link.

I have, unintentionally, put over 20 counts on it, in one visit- another poster, here on the NG, said he added 40 on one visit. I wonder what an honest counter would show?

I hope this helps.

Bill-W4BSG

Fractenna wrote:(In part)
>
>
> I will be happy to publicly critique said article, just as I have in the past,
> on the ham page web site reviewing other fractal antenna articles for hams.
> This site gets over 4000--7000 different vsiitors, on average, a month. This is
> approximately the same number of subscribers as found in QEX.
>
> 73!
> Chip N1IR

3234. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925085201.25741.00000793@ng-mg1.aol.com>
Source record: 179590

Bill Aycock said:
>
>CHips reading skills and memory are pitiful- I never said anything about
>the patent, and only asked for the antenna file, and I did that only on
>his list.
>

Here is your post ON THIS PUBLIC AND GLOBALLY ACCESSED NG from last month:

<<Al- You are SO right- nice!
>
>His computer is still functioning- there is a mini love fest going on on
>the private list, interspersed with notice that he cant talk about the
>two more patents he expects out soon.
>
>He has also offered to make copies of THE PATENT for anyone who sends in
>a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
>qualify. Guess I'm out.
>
>He will be busy till after Labor day, so copies will be delayed.>>

NC

3235. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925085501.25741.00000794@ng-mg1.aol.com>
Source record: 179591

>Chip- It is NOT 4000-7000 visitors- and you know it- it's that many
>"hits", and the faulty (?) counter on that site registers a hit
>everytime you select a different internal link.
>
>I have, unintentionally, put over 20 counts on it, in one visit- another
>poster, here on the NG, said he added 40 on one visit. I wonder what an
>honest counter would show?
>
>I hope this helps.
>
>Bill-W4BSG
>
>Fractenna wrote:(In part)
>>
>>
>> I will be happy to publicly critique said article, just as I have in the
>past,
>> on the ham page web site reviewing other fractal antenna articles for
>hams.
>> This site gets over 4000--7000 different vsiitors, on average, a month.
>This is
>> approximately the same number of subscribers as found in QEX.
>>
>> 73!
>> Chip N1IR
>

Hi Bill--

My information is accurate.

I am provided a monthly summary of the hits and visitors on EACH web page.

73
Chip N1IR

3236. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CF4C0C.AC6BE1E4@hiwaay.net>
Source record: 179592

I TOLD you Chips reading skills were kaput- nowhere in this quote do I
ask for the patent- I was explaining why I would not qualify, and
therefore was not going to ask.

<chortle>

I hope this helps

Bill-W4BSG

Fractenna wrote:
>
> Bill Aycock said:
> >
> >CHips reading skills and memory are pitiful- I never said anything about
> >the patent, and only asked for the antenna file, and I did that only on
> >his list.
> >
>
> Here is your post ON THIS PUBLIC AND GLOBALLY ACCESSED NG from last month:
>
> <<Al- You are SO right- nice!
> >
> >His computer is still functioning- there is a mini love fest going on on
> >the private list, interspersed with notice that he cant talk about the
> >two more patents he expects out soon.
> >
> >He has also offered to make copies of THE PATENT for anyone who sends in
> >a 3-stamp SASE , EXCEPT- anyone who insulted him on the NG does NOT
> >qualify. Guess I'm out.
> >
> >He will be busy till after Labor day, so copies will be delayed.>>
>
>
>
> NC

3237. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000925090048.05630.00000797@ng-co1.aol.com>
Source record: 179593

Dr. Cohen produced this "wisdom":

>I would be very interested in what your TV repair
>experience might bring to the table on this. I am always interested in
>learning new things!
>

We would be very much interested in what your diaper filling experience as a neurotic child might bring to table on this. Producing sick, childish crap on this NG? Grow up Doktor! It is time long overdue!
Need more attention? Seek professional help.

Tom has more experience than you can ever read about.

BTW I have problem with upstairs toilet. Knowing your expertise on this, could you kindly suggest a best way to fix? Could it be from too much target crapping on your posts? Hmmm?

I don't even hope it helps.

bada BUm

3238. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000925090510.05630.00000799@ng-co1.aol.com>
Source record: 179594

>
>Perhaps you may wish to let Doug know your feelings on this matter. His
>e-mail
>is:
>dsmith@sedona.net
>
>It's good to see our League opening it's eyes to new technologies!
>
>73!
>Chip N1IR
>
>

They don't know what are they getting into. Let them know and point them to archives of this NG. That ought to open their eyes!
More anterntainment coming your way!

bada BUm

3239. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000925093810.25711.00000820@ng-mg1.aol.com>
Source record: 179595

>Well, he is quite good. Hope he got a nice piece of the Cerulean pie:-)<

If you want to invent something truly useful, write a computer program that plugs Doug Grant and John Dorr's contest savvy into a Kachina. Then you can push the button, walk away, and win the contest!

73

Rick K1BQT

3240. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000925094951.25711.00000821@ng-mg1.aol.com>
Source record: 179596

>...the technical editors of any reputable peer reviewed publication will not allow an article to be "peer reviewed" by a list of reviewers "HAND PICKED" by the authors.<

That is correct. The Quarterly had a Senior Technical Advisor and an Editorial Review Board. Reviewers are normally selected by the Editor--based upon specialty area and impartiality. The one time Terry ignored the advice of her advisors (and accepted material the ARRL rejected), look what happened!! Holy samoly!!

Rick K1BQT

3241. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000925095255.25711.00000822@ng-mg1.aol.com>
Source record: 179597

>My rules on MI2 are clear. <

Disclose your file publicly, or put a sock in the public rhetoric. Why should you have it both ways and be "special"?

Rick K1BQT

3242. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qnmkh$gp0$1@iac5.navix.net>
Source record: 179598

I realize that as a BU professor, you need not be able to communicate with anyone but God, however for us mortals.. What the hell is "fould languiage"

"Fractenna" <fractenna@aol.com> wrote in message news:20000925084524.25741.00000792@ng-mg1.aol.com...
> No; the malicious interefernce consisted of fould languiage, carriers;
> 'uhhhhhhh' and so on.
>
> Do you know anything about it?
>
> 73
> Chip n1IR

3243. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CF62C3.EB8D3123@eznec.com>
Source record: 179599

Reg Edwards wrote:
>
> Roy said -
> > My commercial
> > rig has an ALC, and it produces 100 watts out into any
> load, provided
> > that the mismatch isn't so large as to make it shut down.
> The rig's
> > efficiency might be a little less (or more) when presented
> with a 1.8:1
> > mismatch, but why should I care?
> ================================
>
> Roy, you have a remarkable rig if it can provide 100 watts
> into any load, at high efficiency, up to the point when the
> swr is 1.8:1.
> . . .

It's an Icom IC-730. I haven't exhaustively tested it over every possible impedance which can cause an SWR of 1.8:1 or greater, but the SWR of the load it sees is this value or greater more often than not. And every time I've checked the net output power with the Bird wattmeter over the 18 years I've had the rig, it's 100 watts within the meter's accuracy.

My little homebrew Field Day rig also has an ALC. It only monitors forward power, so its net power output drops around 10% at 2:1 SWR.

I have no idea of the efficiency of the output stage when the rig is confronted with an SWR of this level (and made no claims about it), but there's no obvious overheating. It seems to me that a rig which can't handle an SWR of this level isn't very practical.

What does the output of your rig do when it's confronted with 1.8:1 SWR?

Roy Lewallen, W7EL

3244. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39CF61F7.5EEC5F6A@bigfoot.com>
Source record: 179600

Roy Lewallen wrote:
> What does the output of your rig do when it's confronted with 1.8:1 SWR?

Mine *apparently* eats the reflected power. With a Z0-match in the system, the forward power is never less than 100 watts. With a Z0-match absent from the system, the forward power is never more than 100 watts. This appears to be true even before the protection circuitry kicks in.
--
http://www.mindspring.com/~w6rca

3245. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11254-39CF5DF2-18@storefull-118.iap.bryant.webtv.net>
Source record: 179601

Wes, N7WS wrote:
"So how many joules does it take and is the number representative of a lightning discharge?"

Sure, it represents the energy in some discharge, but the test energy was less than that in some discharges and more than that in others.

Sufficient current through a solution vaporizes it rapidly. Examples abound of the power in expanding gas.

Some readers may have seen a chunk of concrete blown from a structure by lightning. Lightning rods and air terminals are used to avoid this and other damage.

Concrete does not have to be recently wet to yet contain moisture. Moisture is always there. Concrete never completely dries. The oldest piece of concrete still has a chemical reaction going on involving its water content. That ancient piece of concrete is yet hardening and strengthening ever so slowly.

Lightning can turn the water in concrete to steam whether the concrete tops a skyscraper or is buried. It is a matter of current density through a small amount of water.

A large surface area doesn`t guarantee uniform current. Even were the concrete conductivity uniform, the conductivity of the soil surrounding the concrete is not uniform. More current flows through some spots than others. The current through a hot spot can cause an explosion.

The prudent way to avoid a split in a tower base from lightning is an external low impedance bypass from each tower leg to an external rod or other good ground connection for that individual leg. A base insulated tower should be ok if there is a good radial ground system. An arc gap somewhere will protect the concrete base.

Ufer designed his grounding system as a safety system to prevent static electricity from detonating bombs set upon a concrete slab. It wasn`t designed to dissipate lightning discharges.

Best regards, Richard Harrison, KB5WZI

3246. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <11254-39CF616A-20@storefull-118.iap.bryant.webtv.net>
Source record: 179602

Yuri, K3BU wrote:
"They (ARRL) don`t know what they are getting into."

Unlike this newsgroup, all submissions aren`t published. Controversy stirs interest. Chip and QEX may need more interest.

Best regards, Richard Harrison, KB5WZI

3247. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CF6879.B481C817@eznec.com>
Source record: 179603

I'm guessing that the software used by my web site for statistics reporting is at least typical. Here are some definitions from their "interpretations" page http://www.netstore.de/Supply/http-analyze/results.html:

Hits

A hit is any response from the server on behalf of a request sent from a browser. This includes any response from the server, not only text files or documents. If, for example, a HTML page has two images embedded, the server generates three hits if this page is requested: one hit for the HTML page itself and two hits for the two inline images.

Pageviews

Pageviews are all files which either have a text file suffix (.html, .text) or which are directory index files. This number allows to estimate the number of "real" documents transmitted by your server. If defined correctly, the analyzer rates text files (documents) as pageviews. Those pageviews do not include images, CGI scripts, Java applets or any other HTML objects except all files ending with one of the pre-defined pageview suffixes, such as .html or .text. . .

Sessions

Similar to unique sites, this is the number of unique hosts accessing the server during a given time-window. This time-window is one day by default for backward compatibility, but it can be changed with the option -u or the Session directive in the configuration file. For example, if the time-window is two hours, all accesses from a certain host in less than 2 hours after the first access from this host are lumped together into one session. All following accesses more than 2 hours apart from the first access will be counted as a new session. This way you may get an estimated number of how many sessions are started on different sites to access your server.

On my site, the ratio of "Hits" to "Pageviews" is 2.24:1, and I have very few graphics on my site. I would expect the ratio to be higher on a site with more graphics.

I figure that "Sessions" number most closely represents the number of visitors. The ratio of "Hits" to "Sessions" since I opened the site several months ago is 6.33:1. I'm sure this varies a great deal from site to site, depending on site layout and how the site is typically used.

Roy Lewallen, W7EL

Disclaimer: I'm not at all a "webmaster" -- I only know what I read in
the instructions. Any amplification or correction would be welcome.

Bill Aycock wrote:
>
> Chip- It is NOT 4000-7000 visitors- and you know it- it's that many
> "hits", and the faulty (?) counter on that site registers a hit
> everytime you select a different internal link.
>
> I have, unintentionally, put over 20 counts on it, in one visit- another
> poster, here on the NG, said he added 40 on one visit. I wonder what an
> honest counter would show?
>
> I hope this helps.
>
> Bill-W4BSG
>
> Fractenna wrote:(In part)
> >
> >
> > I will be happy to publicly critique said article, just as I have in the past,
> > on the ham page web site reviewing other fractal antenna articles for hams.
> > This site gets over 4000--7000 different vsiitors, on average, a month. This is
> > approximately the same number of subscribers as found in QEX.
> >
> > 73!
> > Chip N1IR

3248. antenna building supplies needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: n9yln@aol.com
Message-ID: <20000925110951.03239.00000791@ng-fv1.aol.com>
Source record: 179604

Does anyone know of a good online source for aluminum tubing and other antenna building supplies? Please email me direct at: N9YLN@aol.com with any web links.
Thanks!
73,
Renee

3249. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <HmKz5.3753$s76.298129@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179605

I apologize that this is a bit long. You might find the discussion on the history of Fractal antenna research interesting though.

I am deeply disturbed with the fact that Dr. Cohen has taken this opportunity to turn this thread and technical discussion into a mud slinging match against the company I work for. My posts and statements have always been my personal opinions and do not represent the position or interests of the company. In these threads and discussions, I have never said anything negative or derogatory about Fractal Antenna Systems or the work they are doing. Dr. Cohen and I simply have a differing technical opinion as to the merits of a fractal antenna geometry compared to an arbitrary antenna geometry in the same volume, consisting of the same wire length.

The original discussion began in the thread "$1000 Fractal Antenna Challenge" where I simply asked Dr. Cohen what the stated efficiency of the MI2 loop was. After I made some very general technical comments, Dr. Cohen immediately resorted to statements like the following: "Almost everything you have said is incorrect, and the amount of time needed to educate you on the matter may be better used by your own exploration of the literature" and "Use your Ph.D. and Cushcraft experience to take the fractal challenge. Don't divert us, please, with inaccurate and incorrect conceptual speculations." In the last statement, Dr. Cohen personally invited me to come up with an antenna design that would meet or beat the MI2 loop performance. I decided to accept his personal challenge.

When I presented a design that was close, here was the response I received: "Nope. You did something wrong in your calculations. It is not efficient and the gain stinks. Been there done that. Even fractalized many". Without ever seeing the NEC file or the results, he made the following statements: "READ my info carefully. I said that your design does not work as you describe." This has been his pattern of responses from the beginning of this discussion.

Dr. Cohen then went on to criticize the fact that I work for another antenna company. Note that Dr. Cohen also publicly posted the fact that he does not sell amateur antennas and does not compete in the amateur markets. Given the fact that he does not compete in the amateur markets and does not sell amateur antennas, the fact that I work for an antenna company is irrelevant. From my perspective, this is simply a technical discussion on an amateur antenna reflector.

I would like to further respond to some of Dr. Cohen's statements below.

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924221311.14996.00000641@ng-cb1.aol.com...
> Steve Best said:

>
> " In my opinion, you demonstrate a total lack of moral character."
>
>

I did make this statement about Dr. Cohen. It was made in response to a post where Dr. Cohen again claimed that I was wrong, claimed that I misunderstood basic technical concepts and then he deliberately misquoted some of my statements. Dr. Cohen also claimed I made statements about him that I simply did not make. They were made by someone else on the NG.

I later apologized to Dr. Cohen and the NG for making this statement as I regretted stating my opinion publicly.

> <snip>
>
>
> His firm, and my firm (Fractal Antenna Systems, Inc.) compete for customers in
> the exploding wireless markets (non-amateur).
>

Actually, Cushcraft does not compete in the same commercial areas as Fractal Antenna Systems and we do not consider Fractal Antenna Systems a competitor. Based on the information I have seen on the FAS web page, their product line is more suited to handset and portable product antennas. We do not make antennas for this segment of the market.

Further, I would never discuss any of the FAS products being sold to the commercial market. I would never compare any of our products to his. Commercial pursuits do not belong on this reflector. Quite frankly, Dr. Cohen should be more concerned about his direct competitors in the commercial markets: Fractus, for example.

This discussion is about an amateur antenna on an amateur radio reflector. I do not dispute that his MI2 loop antenna works as claimed. I am simply demonstrating that there are numerous ways to achieve similar performance.

>Cushcraft does not hold patents
> on new antenna technologies in this market and hence, as with other
> competitors, is at risk should a disruptive technology infringe on market
> share.(A publicly accessible review of their patents will show that, in a 20
> year period, only 2 patents--extending the known Yagi array technology--were
> issued to the company. In all fairness, this does not indicate an absence of
> future patents but does indicate a general historical absence of innovative
> IP-held development).
>
> Best is thus not an impartial observer in commenting about issues of IP,

the
> relative 'value' of antenna designs, and so on. He has a concerted stake
in
> assurring that Cushcraft attains a secure market share in the wireless
markets,
> despite competitor's innovations.
>

Congratulations to Dr. Cohen on his patents. He can rest assured that my company will never make a fractal antenna that infringes on any of his patents.

Not all companies or individuals value patents the same way that Dr. Cohen does. First. most small antenna companies do not try to make revenue off the IP by licensing technology. Not all new and innovative antenna designs are patented. Why tell the competition everything that you are doing. They can copy it and use it to compete against you. Anyone file a patent infringement suit? Small companies usually don't have the time nor the financial resources to file patent infringement suits.

People should also be aware of the fact that the issuing a patent is not a certification that the IP is new or innovative. It just means that the patent examiner could not find another patent that had the same claims or discussed the same technology. If a third party can demonstrate that they used similar or identical un-patented technology before the patent file date, the patent owner cannot win a patent infringement suit. He who does it first wins in court.

> The issue of Fractal's IP was, and perhaps is, of interest to Cushcraft.
Two
> years ago, I was called (unsolicited) by Marcos Rosenbaum, who talked with
me
> for an hour on the phone, trying to find out everything he could about
> Fractal's patent positions. Although I was cordial and provided
SUFFICIENT
> SCIENTIFIC INFORMATION--as I do for any colleague in that context, I did
not
> provide anything not publicly available. I advised him to arrange a
meeting
> with Mr. Best: we could 'do lunch' and discuss how to take the
conversation
> further. When I did not hear from Mr. Rosenbaum I called him several weeks
> later, with no return call.
>

Irrelevant to the current discussion. I don't recall this incident. I am sure at the time we were interested in seeing what the claims were and whether or not the whole issue was just another hoax or marketing gimmick. We would not have called back because we were simply not interested.

> At this time there were rumors floating that Fractal would not receive any
> patents and, just as now, the usual junk-debunkers contending it did not

> provide any advantages. I am not implying that Cushcraft was responsible
for
> such rumors; I am merely pointing out that the timing for suddenly being
> 'uninterested' is itself an interesting coincidence.
>

Cushcraft was not responsible for any rumors, then or now.

> Now: look when Steve Best suddenly shows up to evince some interest. Go
look at
> his posting record, and then look at the dates when Fractal announced that
its
> first patent would issue. Again, an interesting coincidence.
>

I really have no interest in your patents but good for you in being awarded
them.

I am interested in Fractal antennas for one main reason. For the past several years I have taught an introductory course at numerous wireless conferences titled: Antennas and Propagation for Wireless Communications. In teaching this course I have been asked numerous times: "What can you tell us about fractal antennas?" I could address the issue in a limited manner but not in the depth necessary to cover the topic adequately. So I did some research on fractal antennas and the claimed performance.

There is (has been) a lot of research being done on the topic:

The first known discussion of the use of fractal geometry in antennas was made at the University of Illinois in November of 1993 by Carlos Puente. This may differ from other stated opinions on this NG.

The first use of fractal geometries for small antennas was made by Carlos Puente and Nathan Cohen. I think this may have been in 1994.

In 1994 Carlos Puente presented some ideas on using fractal antennas at a URSI meeting in Spain. He submitted a paper on the topic to the IEEE in 1994 as well. The paper was published in 1996. Carlos did his Ph.D thesis on the topic of Fractal Antennas and has published some 8 - 9 papers (that I am aware of) on the topic. He also wrote a chapter in a book titled "Fractal in Engineering". The title of his chapter was "Multiband Fractal Antennas and Arrays". The book was published in 1997.

Dr. Cohen has also published a few papers on the subject as well. I am aware of at least 4 that he has published in Comm Quart.

My interest in Fractal antennas is purely technical, nothing else. I started posting to the NG on this subject when Dr. Cohen "staked his career on the efficiency of the MI2 being higher than any other design". I asked Dr. Cohen what the efficiency of the MI2 was and it all went from there.

> The fact of the matter is that random fractals--as well as deterministic
one--
> have already demonstrated optimum electrical performance. This is nothing

new:
> see Landstorfer and Sacher for an early and historical taste of this. In
> addition, in the cases where optimum means 'frequency independent',
Hohlfeld
> and Cohen made the clinching case for this for the relevant class of
fractals,
> in 1999. This was written up widely in the press, including Scientific
American
> in July 1999.
>
> In other words, Best wants us to ignore the past; ignore realities; and
cater
> to his not so objectively defined interest in this subject.
>

Dr. Cohen is correct, the recent work and discussions on fractal antennas is nothing new. Techniques for lowering resonant frequency and shrinking antenna volume have been used for years. The simple fact of the matter is that fractal geometries are another way to lower resonant frequency and antenna volume. As one would expect, an arbitrary shape in the same volume with the same wire length offers similar or, in some cases, better performance.

>
> Here are the facts:
>
> 1) Best tried to 'better' the MI2 design with a helical one, using 5 inch
> diamter(!!!) tubing. A 3D design (so much for the rules)
>

This was just another option to demonstrate the fact that an arbitrary shape in the same volume with the same wire length offers similar performance. Dr. Cohen went on to ridicule this approach, inaccurately described it and then actually posted a very sarcastic thread on the concept.

> 2) Best claims to have a 'random' design that works as well, yet has not
and
> apparently will not, provide the file that he offered publicly on this NG.
>

I have provided it to other people on the NG. I asked Dr. Cohen for his MI2 file and he will not give it to me. Why should I give him mine?

> 3) Best claims to have an "(almost)2D" loop which works better than MI2.
Again;
> so much for the rules.

Dr. Cohen has a problem with the English language. Here is my statement: "I have now come up with another arbitrary (somewhat) 2D loop configuration that fits within the same physical aperture as the MI2 Fractal loop." The "(somewhat)" was in reference to the arbitrary shape.

> 4) Best claims that the 'small loop performance is SOLEY DO to the length
of
> wire used and x and y axis symmetry', a clearly incorrect assessment.
>

Just an aside: You really need to use spell check! Of course, it would have
missed "do".

If I am incorrect, why have been able to demonstrate similar or better
performance with at least 3 arbitrary shapes in the same volume with the
same wire length?

> It is time for Mr. Best to act like a scientist and stop diverting the
issue.
> If he has something then show us. As I scientist I will respond, in
praise, or
> critique, or in helpful suggestion.
>

Dr. Cohen's posts in this subject are anything but scientific. I wonder if
his peers and boss at BU would view his behavior on this NG as professional
and scientific?

> Where, Mr. Best, is the FILE? At this point I WILL NOT help him in any way
> until he backs up his claims, by providing the file to those who requested
it.
>
> Nathan Cohen, Ph.D.

I did not ask for Dr. Cohen's help.

73,
Steve VE9SRB

3250. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CF7583.37011C91@bellatlantic.net>
Source record: 179606

There's the theory, and there's the practical side.
It's the influence of ground & nearby objects, plus
loss in the coax, that changes the number between
the theory (actually, I think its 72 ohms in free space)
and the measured SWR.

Brian Kelly wrote:

> ehsjr@bellatlantic.net wrote:
>
> > ....
> > analyzer to the antenna with 20 feet of rg 58 and tune it for lowest
> > SWR. You need to be able to get to 1.2 to 1 or below. . . .
> >
> > I believe your 1:8 to 1 SWR is not due to its height - I suspect it is
> > due to being near the structure and balcony.. . .
>
> >
> Last I heard the feedpoint impedance of a dipole at resonance is 75 ohms which
> would create a 1.5 swr into a 50 ohm line from the gitgo and ought to the
> lowest possible swr. ??
> >
> w3rv

3251. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39CF76C5.1A1EA19F@bellatlantic.net>
Source record: 179607

Bill Aycock wrote:

> Sideband- please dont assume that a non-ideal EWR indicates lots of
> loss. It just is not true. Several facts are:
> 1. If the rig is working into the 1.8, and not cutting power back, its
> not doing much harm.

But it is limiting his bandwidth. 1.8 to 1 could be ignored at the
band edges, no problem. But if he's at 1.8 to 1 minimum, how
far can he tune before the rig goes into foldback?

3252. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39d4773f.260100695@news.seanet.com>
Source record: 179608

On Mon, 25 Sep 2000 15:41:27 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>I apologize that this is a bit long. You might find the discussion on the
>history of Fractal antenna research interesting though.
>
snip
>
>I did not ask for Dr. Cohen's help.
>
>73,
>Steve VE9SRB
>

Hi Steve,

It was all very interesting, but once again TROLLing has accomplished
its purpose to change the topic from my point which included a
CREDIBLE RESOLUTION:

Few in this venue have made note of one particular ambiguity:
>Size must fit in a form factor of about 1/8 by 1/8 wave.

must...about

What satisfies this criteria? Some form factor 17.2% larger than 1/8
waves and not others? Or will the judge mandate that his
understanding is that all designs "must" be 13.7% smaller? Either
finding is "about" right - neither of them is absolutely right
however. This may be resolved quite simply by changing the challenge
to read:
>Size must fit in a form factor of 1/8 by 1/8 wave.
Or similar, specific dimension. Or curiously, why not:
>Size must fit in a form factor of 1/8 by 1/8 wave, or smaller.

Steve has done a yeoman's job of replicating the MI2, and I believe he
has the superior MI2 design in that regard alone, much less the design
he introduces above. My comparison of his claimed results against my
EZNEC analysis of the MI2 ELNEC file show Steve's outperform it. If
Steve submitted that file - as has been clamored for - then two people
would have the best MI2 design.

Insofar the call for you to submit your work to peers, I would
embellish that so as to draw the focus to a CREDIBLE RESOLUTION:

Submit your work in escrow to a panel of judges composed of members in
this forum. This is the peerage called rec.radio.amateur.antenna.

(Let the best of commercial designers approach OUR Amateur contest fields. I am sure the members would accept any challenge, and the peerage would exercise the right of adjudication.)

To those who cannot find peers in this forum: you are probably in the wrong place, serf.

To those Wild Eyed Missionaries who proclaim their calling takes them to foreign lands (our back yard) where they have no peers - yeah. We have a College of Cardinals. Missionaries sit below the salt.

73's
Orlando Furioso, KB7QHC ;->

3253. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CF7C7B.1AC47E7@eznec.com>
Source record: 179609

This is true, and something I hadn't considered either. A little experimentation would answer the valid question you raise. But if I were he, I'd find out why I'm not hearing anyone before spending any more time fussing with the SWR.

Roy Lewallen, W7EL

ehsjr@bellatlantic.net wrote:
>
> Bill Aycock wrote:
>
> > Sideband- please dont assume that a non-ideal EWR indicates lots of
> > loss. It just is not true. Several facts are:
> > 1. If the rig is working into the 1.8, and not cutting power back, its
> > not doing much harm.
>
> But it is limiting his bandwidth. 1.8 to 1 could be ignored at the
> band edges, no problem. But if he's at 1.8 to 1 minimum, how
> far can he tune before the rig goes into foldback?

3254. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CF7CCD.BF6970EB@eznec.com>
Source record: 179610

That's the way my homebrew rig works, since it only monitors forward
power. The Icom is smarter, increases the forward power as necessary to
keep the net at 100 watts.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > What does the output of your rig do when it's confronted with 1.8:1 SWR?
>
> Mine *apparently* eats the reflected power. With a Z0-match in the
> system, the forward power is never less than 100 watts. With a
> Z0-match absent from the system, the forward power is never more
> than 100 watts. This appears to be true even before the protection
> circuitry kicks in.
> --
> http://www.mindspring.com/~w6rca

3255. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <L8Lz5.3880$s76.300087@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179611

"Richard Clark" <rclark@epicedge.com> wrote in message
news:39d4773f.260100695@news.seanet.com...
> On Mon, 25 Sep 2000 15:41:27 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> Insofar the call for you to submit your work to peers, I would
> embellish that so as to draw the focus to a CREDIBLE RESOLUTION:
>
> Submit your work in escrow to a panel of judges composed of members in
> this forum. This is the peerage called rec.radio.amateur.antenna.
>
> 73's
> Orlando Furioso, KB7QHC ;->

Richard,

Works for me.

Steve

3256. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qnv3n$ld2$1@iac5.navix.net>
Source record: 179612

A well thought out rebuttal in contrast to the childish ranting and
fraudulent misrepresentations of Chip and Company

"VE9SRB" <srbest@worldnet.att.net> wrote in message
news:HmKz5.3753$s76.298129@bgtnsc06-news.ops.worldnet.att.net...
> I apologize that this is a bit long. You might find the discussion on the
> history of Fractal antenna research interesting though.
>

3257. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39CF80C7.3842E93B@hiwaay.net>
Source record: 179613

Richard- THanks- both you and Steve read, understand, and, especially, USE, the English language quite well- and, as an aside, your quotes are really quotes. I could add that, unlike the good Doctor N.C., you also use attribution in the correct, honest way.

Could you guess that these complements, real though they are, are back-handed jabs at a certain assistant professor at a community College in the Boston area?

I hope this helps.

Bill-W4BSG

Richard Clark wrote:
>
> On Mon, 25 Sep 2000 15:41:27 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> >I apologize that this is a bit long. You might find the discussion on the
> >history of Fractal antenna research interesting though.
> >
> snip
> >
> >I did not ask for Dr. Cohen's help.
> >
> >73,
> >Steve VE9SRB
> >
>
> Hi Steve,
>
> It was all very interesting, but once again TROLLing has accomplished
> its purpose to change the topic from my point which included a
> CREDIBLE RESOLUTION:
>
> Few in this venue have made note of one particular ambiguity:
> >Size must fit in a form factor of about 1/8 by 1/8 wave.
>
> must...about
>
> What satisfies this criteria? Some form factor 17.2% larger than 1/8
> waves and not others? Or will the judge mandate that his
> understanding is that all designs "must" be 13.7% smaller? Either
> finding is "about" right - neither of them is absolutely right
> however. This may be resolved quite simply by changing the challenge

> to read:
> >Size must fit in a form factor of 1/8 by 1/8 wave.
> Or similar, specific dimension. Or curiously, why not:
> >Size must fit in a form factor of 1/8 by 1/8 wave, or smaller.
>
> Steve has done a yeoman's job of replicating the MI2, and I believe he
> has the superior MI2 design in that regard alone, much less the design
> he introduces above. My comparison of his claimed results against my
> EZNEC analysis of the MI2 ELNEC file show Steve's outperform it. If
> Steve submitted that file - as has been clamored for - then two people
> would have the best MI2 design.
>
> Insofar the call for you to submit your work to peers, I would
> embellish that so as to draw the focus to a CREDIBLE RESOLUTION:
>
> Submit your work in escrow to a panel of judges composed of members in
> this forum. This is the peerage called rec.radio.amateur.antenna.
> (Let the best of commercial designers approach OUR Amateur contest
> fields. I am sure the members would accept any challenge, and the
> peerage would exercise the right of adjudication.)
>
> To those who cannot find peers in this forum: you are probably in the
> wrong place, serf.
>
> To those Wild Eyed Missionaries who proclaim their calling takes them
> to foreign lands (our back yard) where they have no peers - yeah. We
> have a College of Cardinals. Missionaries sit below the salt.
>
> 73's
> Orlando Furioso, KB7QHC ;->

3258. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <vxLz5.3915$s76.301657@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179614

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924221311.14996.00000641@ng-cb1.aol.com...
> wrote
>
> <SNIP>
>
> Nathan Cohen, Ph.D.

On numerous occasions, this technical conversation has taken some very unnecessary and very unprofessional turns. I am not sure what the real agenda is for Dr. Cohen. As evidenced by this post, it is not to engage in a simple, open technical discussion.

My agenda in this matter is very straightforward: to simply participate in a technical conversation regarding the merits of fractal and non-fractal antenna geometries.

I am embarrassed at the foolish ranting of Dr. Cohen and the fact that I find myself compelled to respond to them - most importantly when they unprofessionally address the issue of my employment. In the future, I will avoid responding to him on any matter other than a direct technical topic. I apologize for my participation in the non-technical aspects of this discussion.

73,
Steve, VE9SRB

3259. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8qo07jbso1@news.tribune.com>
Source record: 179615

I have a Solarcon 1/2 wave over 1/4. As near as I can tell it is a 1/4 wave sleeve with the whip being "loaded" to appear as a half wave. Several manufacturers make this configuration. Mine tunes with two "rings" I bought it from Radio Shack a couple of years ago for under $100. I have it mounted 18 feet above ground and use it on Ten meters. I works just fine, although my 2 element quad will do better when pointed in the right direction.

KA9CAR

Janice Ogden <ogdenjm@gte.net> wrote in message news:39CDA050.EE9EBFD7@gte.net...
> Anyone wish to share their opinions on the best of the 3 antenna's that
> I have listed? I already have a Maco V-5000 on the roof, Im looking for
>
> a good 2nd antenna for my other radio to put up in the tree at about
> 60'.
>
> 1-Shakespeare ABS-1600 Base Antenna
> 2-Antron99 Omni-Directional Antenna
> 3-Solorcon I-MAX 2000
>
>

3260. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <GHLz5.3932$s76.302796@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179616

Yo! Barry!

Thanks for your setting me straight!

I'll just go kill myself now.

But before I get out the Hari-Kari knife,
(A division of Ginsu Industries Ltd.)

Let me just say this:

Bite me.

Let a cb'er get info on CB antennas on the CB news group.

Now back to the regularly scheduled arguments,
backstabbing, and insulting that normally goes
on here.

I'm off to sharpen a knife...

Gary.

--
Sarcasm is wasted around here....

Barry D <x123x123@yahoo.com> wrote in message
news:Xvwz5.210554$c5.4462052@news2.rdc1.on.home.com...
>
> Gary you are an idiot. There is more childish fighting and
back stabbing in
> this newsgroup than most. If you do not have an answer for
this person then
> just pass on by.
>
> Barry D.
>
>

3261. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000925131322.18568.00000732@ng-cu1.aol.com>
Source record: 179617

Hi Steve--

>I did not ask for Dr. Cohen's help.<

It appears you aren't in need of it.

I think it's time for Chip to cut the bullshit and show us what he's got.
Anyone else feel that way??

Rick K1BQT

3262. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39CF88EE.3BF8A42A@eznec.com>
Source record: 179618

It seems rather foolish (and childish) for people to brag about the performance of their antennas based on an EZNEC model, then refuse to let anyone (or those not considered worthy) see the model. And a public challenge where challengers are required to beat an antenna but not allowed to see a model of it is pretty silly.

So here's what I'll do. I'll be glad to post any EZNEC models involved with this discussion on my web site for any interested person to download. I'll put them in a public directory, and you won't even have to look at my site itself in order to get the files by ftp.

I'll also translate to EZNEC format any submitted NEC-2 or NEC-4 file and post the resulting EZNEC file. This ability is a standard feature of EZNEC pro, which will be used for the translation. Note: Not all NEC "cards" can be translated; I'll let the person submitting the file know if it can't be accurately translated.

As I upload each file, I'll post on this newsgroup the name of the file, the date submitted, and the person submitting it. Otherwise, I won't comment on the files or modify them in any way, unless one is received with an already-used name, in which case I'll modify the name with the permission of the person submitting it. (I might also put a text file on the web site in the same directory as the files explaining what they are.)

I strongly suggest that each file be accompanied by an "antenna notes" file. This is simply an ASCII text file with the same base name as the EZNEC file, but with a .txt extension. It should include anything you want to say about the antenna or model. I suggest you also include your name and the date in this file. In the case of NEC files, put this on CM "cards" -- EZNEC pro will extract these to the "antenna notes" file. EZNEC 3.0 users can create and edit this file within EZNEC if desired. Others can create it with any text editor such as Notepad. I hate to take the role of "moderator", but since they'll be on my web site, I will take a look at these, and won't post any which contain personal comments about individuals or the like -- you know what I'm talking about. Please keep them objective and focused on the antenna and/or model. (I won't edit them in any way or reject any on the basis of any claims about the antenna. I'm simply trying to keep personal comments and insults out.) If anyone does submit a text file that's objectionable, I'll let him know, and will explain the problem. Or, if he prefers, the model can be posted on the web site without notes, and he can post any comments he likes on the newsgroup.

Because I'm not editing or passing judgement on any of these files except as noted above, I don't endorse them or any claims made for them,

either in the text file or elsewhere, in any way. I'm just offering to post them in a publicly available spot.

All you need to do to get your model posted is to attach it (and accompanying notes file) to an email message to me, with a clear request for me to post it on my web site. This offer includes only models involved with the MI2 "challenge". I won't post, or share, anything anyone sends unless it's accompanied by an explicit request to do so.

Very few of the readers of this newsgroup have access to EZNEC pro, so most are limited to a maximum of 500 segments. Please note if your model contains more than this number.

It seems that the Fractenna web site would be more appropriate for this, but I'm glad to help.

Roy Lewallen, W7EL

3263. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qmt1g$uk1$1@slb6.atl.mindspring.net>
Source record: 179752

Thread:

What bullshxx!

[snip]
"Fractenna" <fractenna@aol.com> wrote in message
news:20000921192123.25790.00000254@ng-mg1.aol.com...
> >If Chip would use the same process to write his article as I use for
mine,
> >he will send a copy to his "hand picked" peers, who will give Chip
feedback
> >that will make his article more accurate and useful.
>
> I have done this for 70 articles. Why would i stop now?
>
> NC
[snip]

What rubbish!

Absolutely NOT, the technical editors of any reputable peer reviewed publication will not allow an article to be "peer reviewed" by a list of reviewers "HAND PICKED" by the authors.

Such a reputable technical editor may use some of the reviewers suggested by the authors, but will always seek out and insist on the inclusion of others not "hand picked" by the authors.

In particular he or she will seek out those who perhaps hold opposing views or who in other ways are "guaranteed" to be objective and critical. This is the only process that ensures quality results!

Clearly Chip N1IR aka Dr. Nathan Cohen seems to disagree with this process. He seems to insist that only he can select the peers who will review his work! Sort of like the Hitler theory of Scientific Research I guess.

For God's sake folks, peer review is not a "blessing" of a publication by a group of friends of the author!

Rather peer review is the essence of the "scientific method", the seeking out of criticism and tough questioning to ensure the validity and accuracy of the published results.

What?

Peter K1PO

3264. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qmt71nge1@slb6.atl.mindspring.net>
Source record: 179753

Thread:

Frank Drake, what?

A peer review committee of one?

If I am not mistaken, I believe that Frank Drake, was/is Chip's mentor and thesis advisor. Unbiased, objective? You be the judge?

Even Al Einstein was not peer reviewed by a committee of one.

What?

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message news:20000921214721.25790.00000298@ng-mg1.aol.com...
> >>From: fractenna@aol.com (Fractenna)
> >
> >>>If Chip would use the same process to write his article as I use for mine,
> >>>he will send a copy to his "hand picked" peers, who will give Chip feedback
> >>>that will make his article more accurate and useful.
> >
> >>I have done this for 70 articles. Why would i stop now?
> >
> >Exactly the point I was making, Chip; sending articles to ones colleagues is
> >a
> >normal and accepted process. I raised the issue to point out that the
> >implication that there was something underhanded in your wish for peer review
> >was a false one.
> >
> >My choice of the word "would" in the paragraph was not intended to say that
> >would not.
> >
> >73,
> >Ed Hare, W1RFI
>
>
> Anyone who would avoid feedback on a scientific MS is a fool.
>
> Peter 'O' (PO) Brackett wants to know who was/will review my latest

SETI
> manuscripts before they are published.
>
> That's easy: Frank Drake.
>
> The last thing I would do is publish something wrong and embarassing in a
> proceedings in honor of him.
>
> Watta guy!
>
> 73
> Chip N1IR

3265. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qmtft$mm8$1@slb0.atl.mindspring.net>
Source record: 179754

Thread:

Sara and what she has done with her high school project are simply great.

We should all support the activities of our youth in scientific and academic endeavors of all sorts.

However, even Sara would not agree that she was or is a peer fit to review the engineering or scientific output of professionals or academics. Further still, a high school science fair project is certainly not an endorsement of the validity or usefulness of any scientific or engineering work.

Aside: Sara if you are reading, CONGRATULATIONS, great work. Keep it up.

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20000921205531.18334.00000274@ng-fl1.aol.com...
> BTW, if you look closely on page 20 of Oct QST, you'll see one of Sara's
MI2
> elements on the picture of her science fair display:-)
>
> Then again, I always knew MI2 was a winner...:-)
>
> 73
> Chip N1IR

3266. Re: Gap Titan DX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Mogens <petsen@lazy.dk>
Message-ID: <8qmu95$o96$1@news.inet.tele.dk>
Source record: 179755

Yes, the 4 radial kit is to be used at a certain height. Going lower
increase the amount of radials.

If one can run a vertical without radials he must consider him self as
extremely lucky.
Or maybe it's not as efficient as it could be. Running 100 Watts into an
antenna that looses the most of the power into the earth is the same as
running QRP into an efficient antenna. In both cases you will get DX. But
why not having the antenna radiating the power ?

Mogens (oz1akn)

> Keep in mind that the Butternut radial kit of 4 radials is designed and
> recommended on the basis that the radials will be part of an overall
> *elevated* installation of the antenna and the radials. This does not
> translate into 4 radials being "enough" in a ground environment.
>
> Others on the NG have commented on this matter.
>

3267. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qn9pgafs1@plutonium.btinternet.com>
Source record: 179756

Roy said -
> My commercial
> rig has an ALC, and it produces 100 watts out into any
load, provided
> that the mismatch isn't so large as to make it shut down.
The rig's
> efficiency might be a little less (or more) when presented
with a 1.8:1
> mismatch, but why should I care?
==========

Roy, you have a remarkable rig if it can provide 100 watts into any load, at high efficiency, up to the point when the swr is 1.8:1.

A PA has two (plate or collector) ratings, maximum amps and maximum volts. If the ALC is doing its job properly the PA drive will be reduced when either of these ratings is about to be exceeded.

Maximum possible power output occurs when the device is being driven at both maximum ratings.

Thus the pair of ratings also define the load resistance in ohms into which the amplifier will deliver maximum power. It is usually referred to as the "design load". Also the amplifier will be running at its maximum possible efficiency when delivering maximum power into the design load.

But as soon as the actual load deviates from the design value, either the voltage rating or the current rating will be exceeded and the ALC will reduce the PA drive. So both power output and efficiency will immediately fall.

To maintain a constant power output into a wide range of load resistances (in your case from 28 to 90 ohms) requires continuous manual reajustment of the drive level.
Throttling back PA drive simultaneously with delaying the onset of ALC does not work.

The available constant power output and efficiency with manual control would be very low and quite incompatible with the PA's true capabilities.

It should also be mentioned feedback round the ALC loop is not proportional to power delivered to the load. It is usually proportional to the reflection coefficient of the

load relative to the design load.

Reg.

3268. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925064108.09047.00000320@ng-ff1.aol.com>
Source record: 179757

```
>
>Thread:
>
>Frank Drake, what?
>
>A peer review committee of one?
>
>If I am not mistaken, I believe that Frank Drake, was/is Chip's mentor and
>thesis advisor. Unbiased, objective? You be the judge?
>
>Even Al Einstein was not peer reviewed by a committee of one.
>
>What?
>
> Peter K1PO
>
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921214721.25790.00000298@ng-mg1.aol.com...
>> >>From: fractenna@aol.com (Fractenna)
>> >
>> >>>If Chip would use the same process to write his article as I use for
>mine,
>> >>>he will send a copy to his "hand picked" peers, who will give Chip
>feedback
>> >>>that will make his article more accurate and useful.
>> >
>> >>I have done this for 70 articles. Why would i stop now?
>> >
>> >Exactly the point I was making, Chip; sending articles to ones colleagues
>is
>> >a
>> >normal and accepted process. I raised the issue to point out that the
>> >implication that there was something underhanded in your wish for peer
>review
>> >was a false one.
>> >
>> >My choice of the word "would" in the paragraph was not intended to say
>that
>> >would not.
>> >
>> >73,
>> >Ed Hare, W1RFI
>>
```

>>
>> Anyone who would avoid feedback on a scientific MS is a fool.
>>
>> Peter 'O' (PO) Brackett wants to know who was/will review my latest
>SETI
>> manuscripts before they are published.
>>
>> That's easy: Frank Drake.
>>
>> The last thing I would do is publish something wrong and embarassing in a
>> proceedings in honor of him.
>>
>> Watta guy!
>>
>> 73
>> Chip N1IR

I think that a peer review of one is more than sufficient in this circumstance. If you like, I can put you in touch with the publisher. Maybe you can get a bunch of you guys to complain --preferably those who work with and for other antenna companies-- and with some LUCK, maybe you can get me fired; and thrown in jail' and banished from my family; and my company kaput ;and all my 25 years of scientific output expunged from the record.

Say, Peter, why don't you tell the folks who you work for and what you represent?

Cordially,

Nathan Cohen, Ph.D.

3269. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925064338.09047.00000321@ng-ff1.aol.com>
Source record: 179758

>
>Thread:
>
>What bullshxx!
>
>[snip]
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000921192123.25790.00000254@ng-mg1.aol.com...
>> >If Chip would use the same process to write his article as I use for
>mine,
>> >he will send a copy to his "hand picked" peers, who will give Chip
>feedback
>> >that will make his article more accurate and useful.
>>
>> I have done this for 70 articles. Why would i stop now?
>>
>> NC
>[snip]
>
>What rubbish!
>
>Absolutely NOT, the technical editors of any reputable peer reviewed
>publication will not allow an article to be "peer reviewed" by a list of
>reviewers "HAND PICKED" by the authors.
>
>Such a reputable technical editor may use some of the reviewers suggested by
>the authors, but will always seek out and insist on the inclusion of others
>not "hand picked" by the authors.
>
>In particular he or she will seek out those who perhaps hold opposing views
>or who in other ways are "guaranteed" to be objective and critical. This is
>the only process that ensures quality results!
>
>Clearly Chip N1IR aka Dr. Nathan Cohen seems to disagree with this process.
>He seems to insist that only he can select the peers who will review his
>work! Sort of like the Hitler theory of Scientific Research I guess.
>
>For God's sake folks, peer review is not a "blessing" of a publication by a
>group of friends of the author!
>
>Rather peer review is the essence of the "scientific method", the seeking
>out of criticism and tough questioning to ensure the validity and accuracy
>of the published results.
>

>What?
>
> Peter K1PO
>
>

I absolutely agree with the process as originally described. I bet my career on it everyday.

Hand picking reviewers for MS, before I submit, is an essential part of the process of how science is done.

Of course, one may try to foment trouble by confusing this with PEER REVIEW as P.O. does....

73
Chip N1IR

3270. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925064519.09047.00000322@ng-ff1.aol.com>
Source record: 179759

>
>Thread:
>
>Chip wrote...
>
>[snip]
>> benefits the publisher; certainly not the author. And universities now
>make
>> major distinctions between peer reviewed and non-peer reviewed articles.
>So
>> essentially there is no reason for a professional to publish in a ham
>magazine
>> anymore, unless there is an option of peer review.
>[snip]
>
>I am surprised at Chip's apparent lack of perspective on this!
>
>I might point out that all "reputable" Universities have ALWAYS made major
>distinctions between peer reviewed and non-peer reviewed articles. All
>professional and academic authors KNOW that publications in amateur
>magazines are accorded little or no professional or academic recognition!
>What?
>
>Authors publish in ham magazines for hams, hobbyists, experimenters and
>others involved in an avocation, not to build a professional publication
>list for their professional or academic CVs or resumes.
>
>Professional journals, transactions, etc... are for professional or academic
>peer reviewed publications. i.e. IEEE Proceedings, IEEE Transactions on
>Antennas, IEE publications, ACM publications, Nature, SIAM, Journal of the
>Franklin Institute, etc...
>
>Ham magazines and other hobby publications are for those who are pursuing an
>avocation not a vocation!
>
>Everyone knows this.
>
>This is not a discredit to ham or amateur oriented publications, rather to
>the contrary. Such articles may be of the highest calibre, however they are
>usually not subject to professional, academic, scientific, or engineering
>peer review. So what? That's not the intent.
>
>But let's not go around making allusions or claiming that such publications
>are peer reviewed and attempting to use them to establish peer review style

>credibility with such publications. It just ain't so!
>
>Ham and other hobbyist magazines often contain publications by professionals
>and academics, usually written by professionals or academics who are also
>amateurs, but for the purpose of informing and communicating with other
>amateurs and hobbyists, not for establishing professional or academic
>credibility among professional peers.
>
>Everyone knows this, except perhaps for poor ole Chip N1IR.
>
>What?
>
> Peter K1PO

Well, that's very interesting. Why? Because although Doug Smith at QEX did not agree with my other two terms for submitting a MS, he DID agree with my request for peer review.

How about that:-)!

73
Chip N1IR

3271. Re: variometer for ant. tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qnac6$bm0$1@plutonium.btinternet.com>
Source record: 179760

Mike Camp <mikerobin@home.com> wrote in message
news:XdBz5.246491$i5.3358688@news1.frmt1.sfba.home.com...
> Roller inductors are somewhat expensive, and possibly
difficult to homebrew.
> I have not seen anyone build a variometer for a tuner.
Seems like it would
> be simpler to construct. It would need a lot of gear
reduction to get a
> suitable tuning rate, but that aside, it seems workable.
Any thoughts?
==========

Indeed it will work. But there's one big disadvantage of a variometer compared to a roller coaster - a very low Q and high loss when set to a small inductance.

This is because all the wire resistance is in circuit all the time whatever the inductance.

Might be OK for receivers. But no good for high power, multi-band transmitters.

Reg, G4FGQ

3272. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925064646.09047.00000323@ng-ff1.aol.com>
Source record: 179761

>Let's discuss something much more important. How many girls
>did you kiss in high school? :-)

Are 'dupes' allowed?

73
Chip N1IR

3273. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925065014.09047.00000324@ng-ff1.aol.com>
Source record: 179762

>
>The NG should be aware that this offer is a lie. He offered the EZNEC
>file for one of his antennas to the group (yep- public offer) under the
>same set-up- ie, join his private list.
>
>I did just that, and found a post that said to ask Chip, directly. I
>did. Chip answered, said he would send the file, in "a couple of days".
>
>After four days, I sent him a query-(on his list)- no answer. Knowing he
>monitored this NG, I asked him the same question, here- ie, did he
>forget to send it to me?)
>
>HIs response was to ban me from the list- tell me I would NEVER get the
>file- the reason being that I had posted an offer for him (chip) to
>provide the file, to THE WHOLE WORLD !!. Another Chipper lie.
>
>He was the one that made the offe, not me- He was apparently looking for
>an excuse to ban me, but he picked a silly one, with no truth.
>
>However- I am not asking back on his list- nor do I need his file- I
>have no respect for his censored (heavily, by him)list, or him, and I
>got a very usable copy elsewhere. All the shotcomings of the antenna,
>found by others, proved to be true.
>
>I hope this helps.
>
>Bill-W4BSG
>
>Fractenna wrote:
>>
>> Hi Steve--
>>
>> I am still awaiting the file you publicly offered on this NG.
>>
>> I will also remind you (again) that MI2 and other fractal antenna files are
>> available to members of the fractal antenna list.
>>
>> Again, to remind on joining, do:
>>
>> fractalantenna-subscribe@egroups.com
>>
>> 73
>> Chip N1IR
>

You did indeed make that request, but as you were banned that wasn't a terribly appropriate thing to do!

You don't habd out reading assignments to a student who has been expelled..

Now: Bill Aycock was banned from the list because he took a private list post, inwhich I made an offer to send copies of the latest fractal antenna patent to list members ONLY--and re-transmitted it on this public and global medium--without any publication of the caveat.

I actually DID get some people who requested the patent who are not members of the list but readers here. This despite my effort to fix afetr Bill messed it up.

Nope; Bill was not banned because of an EZNEC file. He was banned for misrepresentation.

73
Chip N1IR

3274. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925065239.09047.00000325@ng-ff1.aol.com>
Source record: 179763

>Hi OM,
>I find this a very strange statement, did you actually send a email to
>VE9SRB requesting a copy for your your own personal and not for
>commercial use, I just wonder what the problem can be?
>
>I received my personal copy of VE9SRB's file and verified the
>information for myself and and I am pleased to say that I DID NOT HAVE
>TO JOIN ANY CLOSED and COMPANY OFFICER CONTROLED LIST to receive this
>file.
>
>I do not see any Need for the use of ANY CLOASED and COMPANY OFFICER
>CONTROLED LIST to disseminate information that is being freely debated
>on this OPEN and UNCENCORED Newsgroup.
>It is my personal opinion if you use this newsgroup to publicize your
>VERSION of the MI2 as you have obviously done then please at least
>have the common courtesy to publicly and freely with NO STRINGS
>ATTACHED provide YOUR VERSION in a OPEN and UNCENCORED forum just like
>Steve VE9SRB has done.
>If you are having email problems I will be more then glad, if VE9SRB
>has no objection to snail mail you a printed copy.
>--
> 73's Steve
> oo
> (__)
> AB2ET
> "I bet Two Extra "Terrestrials"
> Aperture Engine is that a
> singularity detector?
>In article <20000924210220.25326.00000499@ng-da1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>"sideband" <sideband@cac.net> wrote in message
>news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
>.
>>
>> But the advice is still sound. In fact, Steve, if you want, you may
>> email it to me as well. I'll keep copies of the message on three or
>> four of my machines, so if there's ever any question as to the origin
>> or the time of the file, I'll have the proof here. Post it to the NG
>> at the same time, so there's no question.
>>
>> Just my two cents
>>
>> -SSB
>

>>SSB:
>>
>>I would be happy to send you a copy of the file. I want to check it
>>out just to verify that there are no problems with it. I'll send it
>>along shortly.
>>
>>73
>>Steve, VE9SRB
>>
>>
>>
>> Hi Steve--
>>
>> I am still awaiting the file you publicly offered on this NG.
>>
>> I will also remind you (again) that MI2 and other fractal antenna
>files are
>> available to members of the fractal antenna list.
>>
>> Again, to remind on joining, do:
>>
>> fractalantenna-subscribe@egroups.com
>>
>> 73
>> Chip N1IR
>>
>>
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>

Hi Steve--

Can you tell us what an aperture engine is, and who came up with it? I'm sure you feel it is important to explian given that it is important to put in all your posts.

My rules on MI2 are clear.

73
Chip N1IR

3275. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925065331.09047.00000326@ng-ff1.aol.com>
Source record: 179764

>
>John Dorr is more than "quite good", Chip. John is incredible. Holding your
>rate for 1 hour is like running the 100 yard dash. Doing that for an entire
>contest and wracking the scores he does is the Boston Marathon. "Quite
>good",
>indeed!
>
>Rick K1BQT
>
>

Well, he is quite good. Hope he got a nice piece of the Cerulean pie:-)

73
Chip N1IR

3276. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925065551.09047.00000327@ng-ff1.aol.com>
Source record: 179765

>He don't now two much!
>
>He is just getting out of dipers. Congratulations!
>One day he might grow up to be contester. Rates on phone over 400/hr were
>done
>way back in late 70ties, 9/min is quite normal.
>This is antenna NG, not a contest NG.
>Eat chili and fade away! Making fool of yourself!
>
>bada BYm
>

There are universes in which I have no reiable data base.

That's why I asked K1VR.

If this is no'contest' antenna then you should have no trouble beating it:-)

Don't be CHICKEN:-)

73
Chip N1IR

3277. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925065631.09047.00000328@ng-ff1.aol.com>
Source record: 179766

>Maybe it just means that there is no application for a fractal antenna
>that is worth publishing?
>
>I don't know . . .
>
>72/73, George W5YR

You sure don't!

73
Chip N1IR

3278. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000925072018.03594.00000318@ng-cr1.aol.com>
Source record: 179767

>From: fractenna@aol.com (Fractenna)

> I absolutely agree with the process as originally described. I bet my
> career on it everyday.

> Hand picking reviewers for MS, before I submit, is an essential part
> of the process of how science is done.

This process, although not really what is considered peer review, is used by most authors, relying on the draft technical review of people whose expertise and judgement the author trusts. I agree; it is almost essential to good science.

Some publishers may "peer review" by simply inquiring of the author as to whether he has had some outside review of its contents. In other cases, the publisher may send it to someone IT believes competent to review the ms and get their opinion.

I would imagine that most publishers use good judgement and common sense to review incoming manuscripts. QST, for example, can range from the publisher deciding unilaterally to accept or reject a manuscript. They also have internal editorial committee of HQ staff who review manuscripts. Those with technical content are also reviewed by Zack Lau, W1VT, in the ARRL Lab. Antenna articles are generally reviewed by Dean Straw, N6BV, the ARRL Antenna Book editor. Many artilcles are sent to one or more outside reviewers who are ARRL Technical Advisors. RF Safety articles are reviewed by the ARRL RF Safety Committee, etc.

73,
Ed Hare

3279. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000925072712.17246.00000616@ng-fl1.aol.com>
Source record: 179768

>>From: fractenna@aol.com (Fractenna)
>
>> I absolutely agree with the process as originally described. I bet my
>> career on it everyday.
>
>> Hand picking reviewers for MS, before I submit, is an essential part
>> of the process of how science is done.
>
>This process, although not really what is considered peer review, is used by
>most authors, relying on the draft technical review of people whose expertise
>and judgement the author trusts. I agree; it is almost essential to good
>science.
>
>Some publishers may "peer review" by simply inquiring of the author as to
>whether he has had some outside review of its contents. In other cases, the
>publisher may send it to someone IT believes competent to review the ms and
>get
>their opinion.
>
>I would imagine that most publishers use good judgement and common sense to
>review incoming manuscripts. QST, for example, can range from the publisher
>deciding unilaterally to accept or reject a manuscript. They also have
>internal editorial committee of HQ staff who review manuscripts. Those with
>technical content are also reviewed by Zack Lau, W1VT, in the ARRL Lab.
>Antenna
>articles are generally reviewed by Dean Straw, N6BV, the ARRL Antenna Book
>editor. Many artilcles are sent to one or more outside reviewers who are ARRL
>Technical Advisors. RF Safety articles are reviewed by the ARRL RF Safety
>Committee, etc.
>
>73,
>Ed Hare
>

Hi Ed--

Are you implying that Dean Straw was part of the assessment in my QST
submission (of the first fractal antenna manuscript) which the ARRL categorized
as an "April Fool's joke?"

I don't think so.

73
Chip N1IR

3280. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:00:44 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <MAwz5.210585$c5.4462260@news2.rdc1.on.home.com>
Source record: 179637

Murray Neece <RadioRanch@qth.com> wrote in message
news:39CE5C64.7B1B6456@qth.com...
> Check out the D2T at my website...YOULL be much happier and 90MPH is no
> problem... Murray's Radio Ranch: Buy Sell Trade Swap Amateur Radio (Ham
> Radio) Equipment
>

So Murray you are saying that your D2T beam will with-stand a constant 90 MPH wind better than a Shakespere vertical? Murray I find this hard to believe. Can you elaborate on this?

Barry

3281. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:06:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <IFwz5.210614$c5.4462241@news2.rdc1.on.home.com>
Source record: 179638

Yuri Blanarovich <k3bu@aol.com> wrote in message
news:20000924182432.26831.00000665@ng-bg1.aol.com...
> Where is the list or info from attendees of famous closed open house? So
far no
> one came forward from claimed 24 participants in the "open house".
> This thread is open untill we see any comments. Judging by other lying
skunk
> posts, there was nobody and he was multiplied by 24x.
>
> bada BUm

Of course there was nobody but Chip and his 5-7 other personas there. I
sure a good time was had by all.

Barry D.

3282. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:09:16 UTC
From: fractenna@aol.com
Message-ID: <20000924200916.15002.00000744@ng-cb1.aol.com>
Source record: 179639

>
>Wow... Fast conversations. 130 QSO's an hour? That's one every 30
>seconds. INFREAKINGCREDIBLE...
>

No; that rate is not unusual. This is an aspect of ham radio you do not have knowledge of I fear.

>Not that I believe it... 10M phone... voice contacts... 335 QSO's an
>hour on voice?
>

Yes. A very high rate. I think HC5(8)A is able to pull that off occasionally.

>What's the point in having a QSO if you don't actually TALK to the
>person? Doesn't seem to make much sense...
>

It does to those who do it.

>or were you counting the people who answered your CQ whom you didn't
>answer? That doesn't count as a QSO in my book.

How can I count people who I didn't answer? This is not SWL'iing. This is HAM RADIO.

73
Chip N1IR

>-SSB
>

3283. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:11:05 UTC
From: fractenna@aol.com
Message-ID: <20000924201105.15002.00000746@ng-cb1.aol.com>
Source record: 179640

>
>
>Murray Neece <RadioRanch@qth.com> wrote in message
>news:39CE5C64.7B1B6456@qth.com...
>> Check out the D2T at my website...YOULL be much happier and 90MPH is no
>> problem... Murray's Radio Ranch: Buy Sell Trade Swap Amateur Radio (Ham
>> Radio) Equipment
>>
>
>So Murray you are saying that your D2T beam will with-stand a constant 90
>MPH wind better than a Shakespere vertical? Murray I find this hard to
>believe. Can you elaborate on this?
>
>Barry

The D2T is a W8JK array with a terminating resistor, and broadband matching transformer. Since it is, predominently, a WIRE antenna, I wouldn't be surprised at this.

73
Chip N1IR

3284. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:13:22 UTC
From: fractenna@aol.com
Message-ID: <20000924201322.15002.00000747@ng-cb1.aol.com>
Source record: 179641

>Yuri Blanarovich <k3bu@aol.com> wrote in message
>news:20000924182432.26831.00000665@ng-bg1.aol.com...
>> Where is the list or info from attendees of famous closed open house? So
>far no
>> one came forward from claimed 24 participants in the "open house".
>> This thread is open untill we see any comments. Judging by other lying
>skunk
>> posts, there was nobody and he was multiplied by 24x.
>>
>> bada BUm
>
>Of course there was nobody but Chip and his 5-7 other personas there. I
>sure a good time was had by all.
>
>Barry D.

It sured seemed that everyone had a good time. Ran outta burgers--that was the only problem.

Another one in the Spring.

Because the open house is now over by more than a week, and no one has anything relevant to say on it, this thread is closed.

73
Chip N1IR

3285. Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:16:00 UTC
From: jet <jet@ieu.com>
Message-ID: <4Pwz5.16215$Vu5.793808@newsread2.prod.itd.earthlink.net>
Source record: 179642

I've got a Uniden trunk-tracker radio, most of the public safety trunked
radio is in the 850-870Mhz band - and all I have is a broadband antenna.
Any suggestions on a portable antenna that would provide great reception in
this range?
--
Dan Rose
RebCORE, LLC
E-mail danr@rebcore.com
Name brand toner and ink cartridges at discount prices everyday
www.rebcore.com

3286. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:28:10 UTC
From: k1bqt@aol.com
Message-ID: <20000924202810.25753.00000860@ng-mg1.aol.com>
Source record: 179643

We had one of those "blows" go through here a few years ago where the wind direction shifted 180 degrees in a fraction of a second and took down 110 pine trees around the lake. However, it took none of my antennas down, damaged nothing on my property, and did no damage whatsoever to my solar boat tied up out on the lake--even though it blew trees down that flattened my neighbor's boathouse. Big refried happy deal! I think any rational New Englanders know the nature of these cells. I hope you aren't trying to "blow us away" with this epic tale.

Rick K1BQT

3287. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:32:40 UTC
From: k1bqt@aol.com
Message-ID: <20000924203240.25753.00000861@ng-mg1.aol.com>
Source record: 179644

>This is with a JST 245 on 10M phone<

I stand humbled, naked, and corrected. Don't try too hard to picture that, I'm a modest person.

RIck K1BQT

3288. Re: Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:37:25 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <8qm6o4sbq1@nnrp1.deja.com>
Source record: 179649

If you want an antenna for your car, try any CELLULAR telephone
antenna. It should work great for your application.

In article <4Pwz5.16215$Vu5.793808@newsread2.prod.itd.earthlink.net>,
"jet" <jet@ieu.com> wrote:
> I've got a Uniden trunk-tracker radio, most of the public safety
trunked
> radio is in the 850-870Mhz band - and all I have is a broadband
antenna.
> Any suggestions on a portable antenna that would provide great
reception in
> this range?
> --
> Dan Rose
> RebCORE, LLC
> E-mail danr@rebcore.com
> Name brand toner and ink cartridges at discount prices everyday
> www.rebcore.com
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3
http://come.to/funnynews

Sent via Deja.com http://www.deja.com/
Before you buy.

3289. OT Comments on idea for indoor FM antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:43:09 UTC
From: Christopher Mosley <cmosley@voicenet.com>
Message-ID: <xcxz5.384$4s5.6344@news3.voicenet.com>
Source record: 179645

I was thinking of making a directional indoor FM antenna. It would be a two element yagi, using the telescoping elements from television dipoles. For the driven element the dipole would be left as is. The reflector would have the two parts of the dipole fitted soldered together by slighty expanding the thicker end of one of the dipoles.
So, both elements would be adjustable, the greatest length for the reflector being about 5' for ~89 M Hertz. The distance between the elements would also be adjustable to a maximum of about 1/2 lambda.
It would of course rotate.

I am a good mechanic and would have no problem constructing it,
On the other hand I know nothing about antenna design and would appreciate any comments on the efficacy of doing such a thing.
Also any hints or suggestions would be much appreciated, including matching to the standard 75 0hm FM receiver input.

Thanks

3290. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:44:05 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <pdxz5.210949$c5.4463357@news2.rdc1.on.home.com>
Source record: 179646

> >So Murray you are saying that your D2T beam will with-stand a constant 90
> >MPH wind better than a Shakespere vertical? Murray I find this hard to
> >believe. Can you elaborate on this?
> >
> >Barry
>
>
> The D2T is a W8JK array with a terminating resistor, and broadband
matching
> transformer. Since it is, predominently, a WIRE antenna, I wouldn't be
> surprised at this.

Well, since your opinion means shit to me Chirp and you have proven yourself to be a crome-plated asshole and not worthy of a dog pissing on your shoe. I will ignore you dripple.

Mr. Neese actually sells these antennas, so I am sure his opinion/explination will be enough.

Go to hell Chirp

Barry D.

3291. Re: OT Comments on idea for indoor FM antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:46:03 UTC
From: Christopher Mosley <cmosley@voicenet.com>
Message-ID: <ffxz5.388$4s5.6344@news3.voicenet.com>
Source record: 179647

Christopher Mosley <cmosley@voicenet.com> wrote:

> I was thinking of making a directional indoor FM antenna. It would be a two
> element yagi, using the telescoping elements from television
> dipoles. For the driven element the dipole would be left as is. The
> reflector would have the two parts of the dipole fitted soldered together
> by slighty expanding the thicker end of one of the dipoles.
> So, both elements would be adjustable, the greatest length for the
> reflector being about 5' for ~89 M Hertz. The distance between
> the elements would also be adjustable to a maximum of about 1/2 lambda.

I meant 1/4 the wavelength not 1/2.

> It would of course rotate.

> I am a good mechanic and would have no problem constructing it,
> On the other hand I know nothing about antenna design and would
> appreciate any comments on the efficacy of doing such a thing.
> Also any hints or suggestions would be much appreciated, including
> matching to the standard 75 0hm FM receiver input.
>
> Thanks

3292. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:47:22 UTC
From: fractenna@aol.com
Message-ID: <20000924204722.25326.00000496@ng-da1.aol.com>
Source record: 179648

>
>>This is with a JST 245 on 10M phone<
>
>I stand humbled, naked, and corrected. Don't try too hard to picture that,
>I'm
>a modest person.
>
>RIck K1BQT
>

Darn!

I was hoping that I had one of the misprinted front panels:-) Charging 100% markup when I sell:-)

73
Chip N1IR

3293. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:50:41 UTC
From: fractenna@aol.com
Message-ID: <20000924205041.25326.00000497@ng-da1.aol.com>
Source record: 179650

>
>Fractenna <fractenna@aol.com> wrote:
>> This weekend, in just a few hours of operation, I acheived record QSO rates
>> (for me) with the 10M Fractal Quad Yagi seen on:
>
>> http://www.fractenna.com/ham/hampage1.html
>
>> which details the outstanding performance characteristics and ease of
>> construction. The antenna also appeared in (articles by other authors in)
>La
>> Revisita, QTC, and 73 magazines and elsewhere.
>
>> My rate never dropped below 130Q/hr. For one 1/2 hour stretch it acheived
>335
>> Q/hr. On average it was 195 Q/hr.
>
>> At least 2 dozen times I received unsolicited comments which stated I was
>the
>> strongest W on the band.
>
>> This is with a JST 245 on 10M phone.
>
>> I am now using a voice keyer, although I find that it is a real turn off to
>> most CQ's, because it sounds so...unanimated.
>
>> 73!
>
>> Chip N1IR
>
>Big deal. When we are at solar max, like now, 10M is open to anything.
>
>Last solar max I was doing a LOT of traveling. I bought a HTX-100 (25W for
>those that aren't familiar with it), made a dipole out of Radio Shack
>speaker wire, soldered a small lug to each end, and thumb tacked it to
>the wall of whatever hotel/motel I happened to be in at the time. I also
>cut down one of the short Radio Shack CB mag mount antennas so I could
>do mobile in rental cars.
>
>I managed to basically "work the world" with this high-tech setup in what
>little spare time I had.
>
>I am NOT impressed with working a lot of stations on 10M during a solar max.
>The antenna has almost NOTHING to do with it nor is it any indication of how
>well, or badly, the antenna works.

>
>Jim Pennino
>

Well,

Operating skill also has someting to do with it.

But, fundamentally, I agree. That's why I always point out the wbe page, which has heavy documentation of antenna performance. More than you'll find in a ham magazine article or antenna handbook.

See

http://www.fractenna.com/ham/hampage1.html

73
Chip N1IR

3294. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:53:35 UTC
From: fractenna@aol.com
Message-ID: <20000924205335.25326.00000498@ng-da1.aol.com>
Source record: 179651

>We had one of those "blows" go through here a few years ago where the wind
>direction shifted 180 degrees in a fraction of a second and took down 110
>pine
>trees around the lake. However, it took none of my antennas down, damaged
>nothing on my property, and did no damage whatsoever to my solar boat tied up
>out on the lake--even though it blew trees down that flattened my neighbor's
>boathouse. Big refried happy deal! I think any rational New Englanders know
>the nature of these cells. I hope you aren't trying to "blow us away" with
>this epic tale.
>
>Rick K1BQT
>

That wasn't one of those. You do have these shears and other anomlaies which
just dump a vast pocket of air locally. But this one was a confirmed vortex.

Perhaps someone can fill me in though: why is there such a reluctance in
calling a tornado a tornado? Is there some LEGAL/INSURANCE distinction?

Apparently the NWS misses over 90% of F1 tornadoes.

73
Chip N1IR

3295. RBC Short Wave Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:54:48 UTC
From: Sheldon Rabin <srabin@worldnet.att.net>
Message-ID: <snxz5.3129$s76.237879@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179652
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.

One of the Navy's (older) finest ship board receivers 4 through 28 mHZ with
power supply and power supply and speaker connectors.
The agc meter has the range to allow the receiver to be used as a tuned
voltmeter.
We are moving from the area and this and other lab equipment and components
must go.
It's yours for a (non-profit institution) contribution statement.
FOB Northern New Jersey.
SRABIN@WORLDNET.ATT.NET

3296. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 00:56:38 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <apxz5.4775$6T.410089@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179653

"sideband" <sideband@cac.net> wrote in message
news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
.
>
> But the advice is still sound. In fact, Steve, if you want, you may
> email it to me as well. I'll keep copies of the message on three or
> four of my machines, so if there's ever any question as to the origin
> or the time of the file, I'll have the proof here. Post it to the NG
> at the same time, so there's no question.
>
> Just my two cents
>
> -SSB

SSB:

I would be happy to send you a copy of the file. I want to check it out
just to verify that there are no problems with it. I'll send it along
shortly.

73
Steve, VE9SRB

3297. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:02:20 UTC
From: fractenna@aol.com
Message-ID: <20000924210220.25326.00000499@ng-da1.aol.com>
Source record: 179654

Hi Steve--

I am still awaiting the file you publicly offered on this NG.

I will also remind you (again) that MI2 and other fractal antenna files are
available to members of the fractal antenna list.

Again, to remind on joining, do:

fractalantenna-subscribe@egroups.com

73
Chip N1IR

3298. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:03:13 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <lvxz5.4778$6T.410482@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179655

"Richard Clark" <rwclark@rwclark.seanet.com> wrote in message
news:9djMOUiChg650ZKMV66jFf4go5gQ@4ax.com...
>
> Hi Steve, Contestants,
>
> I would like to point out how this design MAY FAIL the "challenge."
>
> Few in this venue have made note of one particular ambiguity:
> >Size must fit in a form factor of about 1/8 by 1/8 wave.
>
> must...about
>
> What satisfies this criteria? Some form factor 17.2% larger than 1/8
waves and not
> others? Or will the judge mandate that his understanding is that all
designs "must" be
> 13.7% smaller? Either finding is "about" right - neither of them is
absolutely right
> however. This may be resolved quite simply by changing the challenge to
read:
> >Size must fit in a form factor of 1/8 by 1/8 wave.
> Or similar, specific dimension. Or curiously, why not:
> >Size must fit in a form factor of 1/8 by 1/8 wave, or smaller.
>

Hi Richard,

You're correct that the proposed designs do not fit within the 1/8 by 1/8
form factor. Then again, neither does the MI2. I have not seen Chip's MI2
file or output data because he will not sent it or post it on this NG. He
said that it is available on the fractal reflector but I tried to join that
in August. After 2 - 3 weeks of "membership pending" status, I gave up on
that.

>
> Steve has done a yeoman's job of replicating the MI2, and I believe he has
the superior
> MI2 design in that regard alone, much less the design he introduces above.
My comparison
> of his claimed results against my EZNEC analysis of the MI2 ELNEC file
show Steve's
> outperform it. If Steve submitted that file - as has been clamored for -
then two people
> would have the best MI2 design.
>

> Insofar the call for you to submit your work to peers, I would embellish
that so as to
> draw the focus to a credible resolution:
>
> Submit your work in escrow to a panel of judges composed of members in
this forum. This
> is the peerage called rec.radio.amateur.antenna. (Let the best of
commercial designers
> approach OUR Amateur contest fields. I am sure the members would accept
any challenge,
> and the peerage would exercise the right of adjudication.)
>

I would be pleased to provide the file to anyone interested (well, almost). I assume that the original MI2 file would have to be submitted as well. I think some criteria should be defined - Ie. resonant frequency, etc.

The practical reality is that the performance of each design is so close that the discussion gets silly. To argue over 10ths of dB or 10ths of % BW is bizarre. I push the discussion because I just have a bit of an issue with someone claiming that they've "seen it all" or that they are "years ahead of everyone else in the IP department". I have worked with too many brilliant engineers to listen to that foolishness over ONE type of antenna design or ONE class of antennas. There is no doubt that the MI2 performs as claimed, however, to claim that the performance is only a result of the Fractal geometry is simply incorrect.

>
> 73's
> Orlando Furioso, KB7QHC ;->

73,
Steve, VE9SRB

3299. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:29:01 UTC
From: w1rfi@aol.com
Message-ID: <20000924212901.28462.00000734@ng-fc1.aol.com>
Source record: 179656

>>You are absolutely correct. If you ever wondered what happened to the kid
>>that used to pee in the sandbox, you can find him here doing the same thing
>>electronically.

>This thread is closed.

I see what you mean...

73,
Ed Hare, W1RFI

3300. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:35:33 UTC
From: w1rfi@aol.com
Message-ID: <20000924213533.28462.00000745@ng-fc1.aol.com>
Source record: 179657

>From: fractenna@aol.com (Fractenna)

>Another one in the Spring.

But Chip, how can you have one in the spring -- you have pronounced this thread to be closed.

Fortunately, I am sure that all of the other rraa participants are not going to trash the thread when you reopen it the way you have tried to do to this one. After all, you would then feel just as frustrated at trying to communicate over the noise as some here have been feeling.

Do you really think your "this thread is closed" conduct is adding anything useful to the discussions here? I see it as destructive and immature.

73,
Ed Hare, W1RFI

3301. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:36:45 UTC
From: fractenna@aol.com
Message-ID: <20000924213645.14996.00000639@ng-cb1.aol.com>
Source record: 179658

>After 2 - 3 weeks of "membership pending" status, I gave up on
>that.

I, as moderator have NEVER RECEIVED a request from Steve Best to join the fractal antenna reflector.

This is simply a prevarication.

Why Best would lie on this is beyond me.Perthaps he can best explain.

Nathan Cohen, Ph.D.

3302. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:37:16 UTC
From: w1rfi@aol.com
Message-ID: <20000924213716.28448.00000807@ng-fc1.aol.com>
Source record: 179659

>From: fractenna@aol.com (Fractenna)

>BTW Rick, any idea who the idiots were who QRM'ed me this morning? I am not
>assuming it was you.

Maybe someone was telling you that the frequency was closed.

73,
Ed Hare, W1RFI

3303. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:39:41 UTC
From: w1rfi@aol.com
Message-ID: <20000924213941.28448.00000808@ng-fc1.aol.com>
Source record: 179660

>From: fractenna@aol.com (Fractenna)

>The FCC has a real time location system using interferometry. I think if more
>hams knew this there would be less malicious interference.

If this problem persists, contact Brennan Price (bprice@arrl.org). Brennan has been able to do some fast calls to the FCC monitoring station from time to time. That is how the West Coast "ditter" was localized to an area; the local hams took over from there and found a ham whose transceiver had been left on when a key malfunction turned the dits on.

73,
Ed Hare, W1RFI

3304. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:41:33 UTC
From: w1rfi@aol.com
Message-ID: <20000924214133.28448.00000809@ng-fc1.aol.com>
Source record: 179661

>From: k1bqt@aol.com (K1BQT)

> stand humbled, naked, and corrected. Don't try too hard to
>picture that...

Now you did it, Rick; you DID close this thread. :-)

73,
Ed Hare, W1RFI

3305. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:43:59 UTC
From: w1rfi@aol.com
Message-ID: <20000924214359.28448.00000810@ng-fc1.aol.com>
Source record: 179662

>From: sideband sideband@cac.net

>Wow... Fast conversations. 130 QSO's an hour? That's one every 30
>seconds. INFREAKINGCREDIBLE...

Was this the 10M contest weekend? That kind of rate when the band is wide open would not be unheard of. It is a pretty impressive rate, though.

73,
Ed Hare, W1RFI

3306. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:49:33 UTC
From: w1rfi@aol.com
Message-ID: <20000924214933.28448.00000811@ng-fc1.aol.com>
Source record: 179663

>From: k1bqt@aol.com (K1BQT)

>Julie's right! Sage advice for any entrant--disclose it publicly, or Chip
>can claim it!

The design could be posted here and sent to Chip. Some versions of EZNEC can
save the antenna as a NEC file.

If it is a superior antenna, I hope that some antenna manufacturer picks it up.

73,
Ed Hare, W1RFI

3307. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:52:01 UTC
From: w1rfi@aol.com
Message-ID: <20000924215201.28448.00000812@ng-fc1.aol.com>
Source record: 179664

>From: sideband sideband@cac.net

>Funny thing... fractenna@aol.com, chipn1ir@aol.com, and
>maxim1066@aol.com have NEVER been online at the same time in the last
>couple leaks, er, weeks.

I think I have 5 screen names attached to my account and they have never been online at the same time, either. I think it pretty clear that most of the fractenna posts are N1IR, as is chipn1ir. I see no attempt to hide.

Don't know about maxim1066, though, but then again, I don't think it matters much.

73,
Ed Hare, W1RFI

3308. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 01:54:38 UTC
From: w1rfi@aol.com
Message-ID: <20000924215438.28448.00000813@ng-fc1.aol.com>
Source record: 179665

>From: k1bqt@aol.com (K1BQT)

>If you've never observed Chip running a frequency before, he speaks with
>exteme
>animation and talks very rapidly--which might easily prompt someone to raise
>such a concern about stress level.

Perhaps someone had their VOX on. These things do happen and the FCC is
generally very understanding about such an unintentional transmission.

73,
Ed Hare, W1RFI

3309. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:05:30 UTC
From: w1rfi@aol.com
Message-ID: <20000924220530.01160.00000593@ng-fc1.aol.com>
Source record: 179666

>From: ehsjr@bellatlantic.net

>I think this is just one more example of poor communication
>from Fractenna, after reading it over several times carefully.

I think all of us have written words that can be taken a different way than we intended; Chip clarified it in a followup post; the clarification was pretty clear.

73,
Ed Hare, W1RFI

3310. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:06:45 UTC
From: k1bqt@aol.com
Message-ID: <20000924220645.28549.00000696@ng-fl1.aol.com>
Source record: 179667

Chip--

>I will also remind you (again) that MI2 and other fractal antenna files are available to members of the fractal antenna list.<

If you have special needs that do not allow you to participate in this NG as a normal person, bring us a slip from your doctor and perhaps some of us will do our best to understand. But, if you're not a special needs child and you've got a file to offer to back your claim, then post it here or piss off.
Otherwise, don't be too upset if you feel the icy blast of exclusion.

Rick K1BQT

Face it, you're reputation and acceptance in this group may just cost you $1000. What's your reputation worth?

3311. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:11:29 UTC
From: k1bqt@aol.com
Message-ID: <20000924221129.28549.00000697@ng-fl1.aol.com>
Source record: 179668

>Was this the 10M contest weekend? That kind of rate when the band is wide open would not be unheard of. It is a pretty impressive rate, though.<

Indeed--Chip talks as fast as he writes.

Rick K1BQT

3312. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:13:11 UTC
From: fractenna@aol.com
Message-ID: <20000924221311.14996.00000641@ng-cb1.aol.com>
Source record: 179719

Steve Best said:

>I push the discussion because I just have a bit of an issue
>with someone claiming that they've "seen it all" or that they are "years
>ahead of everyone else in the IP department

I too think we need to push the discussion, especially as Mr. Best has said of me:

" In my opinion, you demonstrate a total lack of moral character."

For the record, those of us who have been in New England for a while know the owner of Cushcraft and have a fair to great amount of respect for him. He has always done well by and for hams, in particular. I have a great deal of respect for the company as a whole. However-- founders are not necessarily setting the same corporate cultures as management.

Steve Best is President of Cushcraft Antennas and a equity position holder in this private firm.

His firm, and my firm (Fractal Antenna Systems, Inc.) compete for customers in the exploding wireless markets (non-amateur). Cushcraft does not hold patents on new antenna technologies in this market and hence, as with other competitors, is at risk should a disruptive technology infringe on market share.(A publicly accessible review of their patents will show that, in a 20 year period, only 2 patents--extending the known Yagi array technology--were issued to the company. In all fairness, this does not indicate an absence of future patents but does indicate a general historical absence of innovative IP-held development).

Best is thus not an impartial observer in commenting about issues of IP, the relative 'value' of antenna designs, and so on. He has a concerted stake in assurring that Cushcraft attains a secure market share in the wireless markets, despite competitor's innovations.

The issue of Fractal's IP was, and perhaps is, of interest to Cushcraft. Two years ago, I was called (unsolicited) by Marcos Rosenbaum, who talked with me for an hour on the phone, trying to find out everything he could about Fractal's patent positions. Although I was cordial and provided SUFFICIENT SCIENTIFIC INFORMATION--as I do for any colleague in that context, I did not provide anything not publicly available. I advised him to arrange a meeting with Mr. Best: we could 'do lunch' and discuss how to take the conversation further. When I did not hear from Mr. Rosenbaum I called him several weeks later, with no return call.

At this time there were rumors floating that Fractal would not receive any patents and, just as now, the usual junk-debunkers contending it did not

provide any advantages. I am not implying that Cushcraft was responsible for such rumors; I am merely pointing out that the timing for suddenly being 'uninterested' is itself an interesting coincidence.

Now: look when Steve Best suddenly shows up to evince some interest. Go look at his posting record, and then look at the dates when Fractal announced that its first patent would issue. Again, an interesting coincidence.

The fact of the matter is that random fractals--as well as deterministic one--have already demonstrated optimum electrical performance. This is nothing new: see Landstorfer and Sacher for an early and historical taste of this. In addition, in the cases where optimum means 'frequency independent', Hohlfeld and Cohen made the clinching case for this for the relevant class of fractals, in 1999. This was written up widely in the press, including Scientific American in July 1999.

In other words, Best wants us to ignore the past; ignore realities; and cater to his not so objectively defined interest in this subject.

Here are the facts:

1) Best tried to 'better' the MI2 design with a helical one, using 5 inch diamter(!!!) tubing. A 3D design (so much for the rules)
2) Best claims to have a 'random' design that works as well, yet has not and apparently will not, provide the file that he offered publicly on this NG.
3) Best claims to have an "(almost)2D" loop which works better than MI2. Again; so much for the rules.
4) Best claims that the 'small loop performance is SOLEY DO to the length of wire used and x and y axis symmetry', a clearly incorrect assessment.

It is time for Mr. Best to act like a scientist and stop diverting the issue. If he has something then show us. As I scientist I will respond, in praise, or critique, or in helpful suggestion.

Where, Mr. Best, is the FILE? At this point I WILL NOT help him in any way until he backs up his claims, by providing the file to those who requested it.

Nathan Cohen, Ph.D.

3313. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:14:26 UTC
From: k1bqt@aol.com
Message-ID: <20000924221426.28549.00000698@ng-fl1.aol.com>
Source record: 179720

>Now you did it, Rick; you DID close this thread. :-)<

If anybody did spend much time picturing that, I sure as hell don't want to go to lunch with them! I trust you didn't, so I hope I'm still on for a lobster.

Rick K1BQT

3314. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:14:51 UTC
From: fractenna@aol.com
Message-ID: <20000924221451.14996.00000642@ng-cb1.aol.com>
Source record: 179721

>
>>From: fractenna@aol.com (Fractenna)
>
>>BTW Rick, any idea who the idiots were who QRM'ed me this morning? I am not
>>assuming it was you.
>
>Maybe someone was telling you that the frequency was closed.
>
>73,
>Ed Hare, W1RFI
>
>

Hi ED!

Speaking of closed, you may be interested to know that Doug Smith could not provide a suggested fractal antenna design. Therefore I will not aid the ARRL in any planned fractal antenna articles.

You guys sure are consistent!

73
Chip N1IR

3315. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:16:56 UTC
From: k1bqt@aol.com
Message-ID: <20000924221656.28549.00000699@ng-fl1.aol.com>
Source record: 179722

Hey Chip, don't avoid the issue--show us your file! What kind of chickenshit behavior is this???? Do I need a mop to wipe the teardrops off the deck?

Rick K1BQT

3316. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:18:19 UTC
From: fractenna@aol.com
Message-ID: <20000924221819.14996.00000643@ng-cb1.aol.com>
Source record: 179723

>
>>From: fractenna@aol.com (Fractenna)
>
>>The FCC has a real time location system using interferometry. I think if
>more
>>hams knew this there would be less malicious interference.
>
>If this problem persists, contact Brennan Price (bprice@arrl.org). Brennan
>has
>been able to do some fast calls to the FCC monitoring station from time to
>time. That is how the West Coast "ditter" was localized to an area; the
>local
>hams took over from there and found a ham whose transceiver had been left on
>when a key malfunction turned the dits on.
>
>73,
>Ed Hare, W1RFI
>

No; if it was a problem that persisted for more than a few minutes I would call
the FCC directly. I presume they can localize in just a couple of minutes.

Why does this need to go through the ARRL?

73
Chip N1IR

3317. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:22:08 UTC
From: fractenna@aol.com
Message-ID: <20000924222208.14996.00000644@ng-cb1.aol.com>
Source record: 179724

>
>>From: ehsjr@bellatlantic.net
>
>>I think this is just one more example of poor communication
>>from Fractenna, after reading it over several times carefully.
>
>I think all of us have written words that can be taken a different way than
>we
>intended; Chip clarified it in a followup post; the clarification was pretty
>clear.
>
>73,
>Ed Hare, W1RFI
>

Excuse me;

I did not clarify. I provided additional information. There is no room for ambiguity in the original post. If you read it wrong, don't blame me.

NC

3318. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:22:53 UTC
From: fractenna@aol.com
Message-ID: <20000924222253.14996.00000645@ng-cb1.aol.com>
Source record: 179725

>>From: k1bqt@aol.com (K1BQT)
>
>>If you've never observed Chip running a frequency before, he speaks with
>>exteme
>>animation and talks very rapidly--which might easily prompt someone to raise
>>such a concern about stress level.
>
>Perhaps someone had their VOX on. These things do happen and the FCC is
>generally very understanding about such an unintentional transmission.
>
>73,
>Ed Hare, W1RFI

It wasn't a 'note to oneself'. It was clearly worded and directed at me.

NC

3319. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:23:44 UTC
From: fractenna@aol.com
Message-ID: <20000924222344.14996.00000646@ng-cb1.aol.com>
Source record: 179726

>
>>From: sideband sideband@cac.net
>
>>Funny thing... fractenna@aol.com, chipn1ir@aol.com, and
>>maxim1066@aol.com have NEVER been online at the same time in the last
>>couple leaks, er, weeks.
>
>I think I have 5 screen names attached to my account and they have never been
>online at the same time, either. I think it pretty clear that most of the
>fractenna posts are N1IR, as is chipn1ir. I see no attempt to hide.
>
>Don't know about maxim1066, though, but then again, I don't think it matters
>much.
>
>73,
>Ed Hare, W1RFI
>
I don't know and don't care who this person is. It surely isn't me.

Why don't you ask AOL?

NC

3320. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:25:27 UTC
From: fractenna@aol.com
Message-ID: <20000924222527.14996.00000647@ng-cb1.aol.com>
Source record: 179727

>
>>From: sideband sideband@cac.net
>
>>Wow... Fast conversations. 130 QSO's an hour? That's one every 30
>>seconds. INFREAKINGCREDIBLE...
>
>Was this the 10M contest weekend? That kind of rate when the band is wide
>open
>would not be unheard of. It is a pretty impressive rate, though.
>
>73,
>Ed Hare, W1RFI
>

That was an AVERAGE rate. My peak was 330Q/hr.

As best I know, only HC8A has beaten that on phone. I could be wrong though; it is physically possible to do 360 an hour (or so I am convinced).

Chip N1IR

3321. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:26:26 UTC
From: fractenna@aol.com
Message-ID: <20000924222626.14996.00000648@ng-cb1.aol.com>
Source record: 179728

>
>>Was this the 10M contest weekend? That kind of rate when the band is wide
>open would not be unheard of. It is a pretty impressive rate, though.<
>
>Indeed--Chip talks as fast as he writes.
>
>Rick K1BQT
>

May I take that as a compliment in this context?

73
Chip n1IR

3322. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:27:51 UTC
From: fractenna@aol.com
Message-ID: <20000924222751.14996.00000649@ng-cb1.aol.com>
Source record: 179729

>Hey Chip, don't avoid the issue--show us your file! What kind of chickenshit
>behavior is this???? Do I need a mop to wipe the teardrops off the deck?
>
>Rick K1BQT

Which file?

73
Chip N1IR

3323. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:30:41 UTC
From: k1bqt@aol.com
Message-ID: <20000924223041.03534.00000214@ng-cr1.aol.com>
Source record: 179730

Yes

3324. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:37:47 UTC
From: fractenna@aol.com
Message-ID: <20000924223747.15020.00000642@ng-cb1.aol.com>
Source record: 179731

>Yes
>
>

Thank you.

Actually, I find that there are similar 'attention' tricks in contesting to lecturing. Certainly maintaining a drone--whether fast or slow--is a lousy way to hold an 'audience'.

In contesting (or contesting-like condx) most callers listen for a minute or more before they call and they--like me --are attracted by interesting and efficient operating. That makes up for a few dB difference in signals!

I have to say there are some CW operators that I am convinced are using the fingers of God--and the ears! There are some good phone ops too--K1AR is quite good. K1DG is also quite good. But the best was (is) W7RM. Listening to him work JA's was a piece of heaven. You needed a drool bucket when you monitored!

73
Chip N1IR

3325. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:38:11 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CEBA4F.9A449855@att.net>
Source record: 179732

On this QSO rate in the contesting world:

Use a timer and measure how long it takes you to say "W5YR 59 QRZ". Now allow the same amount of time for W5YR to say "QSL 59 TX"

That is the total exchange (QSO) at most. W5YR already has the station's call and all logbook info has been exchanged..

At the conclusion of that maybe a full second, maybe even two, elapses while the contester selects another call. Then the process repeats. Most "good" contesters can run this script in about 10 seconds at most given a cooperative pileup audience.

From these numbers, I think that you can see that a solid pileup can be "run" by a skilled contest operator at at rate comensurate with, typically 10-second exchanges. That corresponds to 3600/10 = 360 exchanges per hour if the rate could be held constant.

Thus, it is not an earth-shattering accomplishment to achieve a QSO rate in excess of 300 per hour. Especially when conditions are good and the pileup is "solid" with lots of "customers" who know the game and play properly.

It still takes a good operator to *maintain* such a rate for hour after hour.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

W1RFI wrote:
>
> >From: sideband sideband@cac.net
>
> >Wow... Fast conversations. 130 QSO's an hour? That's one every 30
> >seconds. INFREAKINGCREDIBLE...
>
> Was this the 10M contest weekend? That kind of rate when the band is wide open
> would not be unheard of. It is a pretty impressive rate, though.
>
> 73,
> Ed Hare, W1RFI

3326. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:40:22 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CEBAD3.74C4D1CE@att.net>
Source record: 179733

Fractenna wrote:
>
>
> Hi ED!
>
> Speaking of closed, you may be interested to know that Doug Smith could not
> provide a suggested fractal antenna design. Therefore I will not aid the ARRL
> in any planned fractal antenna articles.
>
> You guys sure are consistent!
>
> 73
> Chip N1IR

Maybe it just means that there is no application for a fractal antenna
that is worth publishing?

I don't know . . .

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

3327. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:42:12 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CEBB41.9925C8A8@att.net>
Source record: 179734

Which is how you are expected to regard it in order to maintain the
personna and image.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

W1RFI wrote:

> Do you really think your "this thread is closed" conduct is adding anything
> useful to the discussions here? I see it as destructive and immature.

3328. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:42:31 UTC
From: fractenna@aol.com
Message-ID: <20000924224231.15020.00000643@ng-cb1.aol.com>
Source record: 179735

>
>On this QSO rate in the contesting world:
>
>Use a timer and measure how long it takes you to say "W5YR 59 QRZ". Now
>allow the same amount of time for W5YR to say "QSL 59 TX"
>
>That is the total exchange (QSO) at most. W5YR already has the station's
>call and all logbook info has been exchanged..
>
>At the conclusion of that maybe a full second, maybe even two, elapses
>while the contester selects another call. Then the process repeats. Most
>"good" contesters can run this script in about 10 seconds at most given
>a cooperative pileup audience.
>
>From these numbers, I think that you can see that a solid pileup can be
>"run" by a skilled contest operator at at rate comensurate with,
>typically 10-second exchanges. That corresponds to 3600/10 = 360
>exchanges per hour if the rate could be held constant.
>
>Thus, it is not an earth-shattering accomplishment to achieve a QSO rate
>in excess of 300 per hour. Especially when conditions are good and the
>pileup is "solid" with lots of "customers" who know the game and play
>properly.
>
>It still takes a good operator to *maintain* such a rate for hour after
>hour.
>
>72/73, George W5YR - the Yellow Rose of Texas
>Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
>Amateur Radio W5YR, in the 55th year and it just keeps getting better!
>Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>

Speak from experience please. The highest rate I know of is about 350Q/hr from HC5A. I am very interested--really--in others.

73
Chip N1IR

3329. FS: Cushcraft 424B 432 Mhz ant

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:47:28 UTC
From: teaberry44@aol.com
Message-ID: <20000924224728.23642.00000772@ng-ca1.aol.com>
Source record: 179736

For more info on this new, in the box ant, see eBay item number 448179892

thanks - Tom KZ3X

3330. Re: Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:52:41 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CEAFE6.3CBA8C4E@dvol.com>
Source record: 179742

suestec wrote:

> Greetings to all who read this!
>
> I am considering building a dipole with a pair of
> 20 meter HF mobile whips and feed it with
> 450 ohm feed line so I could use the configuration
> to 10 meters.
>
> Questions to ponder:
> Has any one on this reflector ever constructed a
> contraptions as this?

>
I doubt it!
>

>
> How effective was this antenna?
> Would 300 ohm feed line have been a better choice?
> Was a balun needed?

>
If it has two conductors and looks like a dipole you can center-feed it with any open wire line and a balanced tuner. It ought to radiate on any freq if the tuner has sufficient L/C range to get the swr down. Which could get pretty wild except on 20m where it should behave like any other shortened dipole. I wouldn't get a balun into the act except on 20m and only if you feed it with coax on 20m. I also doubt that anybody will get specific about any of it, this is one of those "try it and see what happens" brainstorms. It could be modeled if all the input parameters are known but by the time you waded thru that drill you could probably have it on the air.
>

> Thanks in advance
> Greg, K3ANG

>
w3rv

3331. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 02:53:35 UTC
From: k1bqt@aol.com
Message-ID: <20000924225335.28456.00000829@ng-fc1.aol.com>
Source record: 179737

>K1AR is quite good<

John Dorr is more than "quite good", Chip. John is incredible. Holding your rate for 1 hour is like running the 100 yard dash. Doing that for an entire contest and wracking the scores he does is the Boston Marathon. "Quite good", indeed!

Rick K1BQT

3332. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 03:13:41 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CEB4D5.29DDA666@dvol.com>
Source record: 179739

W1RFI wrote:

> >From: sideband sideband@cac.net
>
> >Wow... Fast conversations. 130 QSO's an hour? That's one every 30
> >seconds. INFREAKINGCREDIBLE...

>
It's a high rate but certainly not unheard of in dxing and contesting circles. In particular the dxpeditioners regularly do considerably higher rates and on ssb, too, and on a sustained basis, hour after hour, which is where the real rubber hits the road.

>
>
> Was this the 10M contest weekend? That kind of rate when the band is wide open
> would not be unheard of. It is a pretty impressive rate, though.

>
ummm . . note that he didn't say he worked 130 stations in a one hour period . . Five q's in two minutes 18 seconds is a "rate" of 130/hr. Been there done that beaucoup times. The check-ins on the 2m nets run about twice that "rate".
>

>
> 73,
> Ed Hare, W1RFI

>
w3rv

3333. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 03:30:38 UTC
From: k3bu@aol.com
Message-ID: <20000924233038.24741.00000867@ng-cl1.aol.com>
Source record: 179738

>
>Speak from experience please. The highest rate I know of is about 350Q/hr
>from
>HC5A. I am very interested--really--in others.
>
>73
>Chip N1IR
>
>

He don't now two much!

He is just getting out of dipers. Congratulations!
One day he might grow up to be contester. Rates on phone over 400/hr were done
way back in late 70ties, 9/min is quite normal.
This is antenna NG, not a contest NG.
Eat chili and fade away! Making fool of yourself!

bada BYm

3334. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 03:40:04 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8qmheh$8ea$1@nnrp1.deja.com>
Source record: 179741

Hi OM,
I find this a very strange statement, did you actually send a email to VE9SRB requesting a copy for your your own personal and not for commercial use, I just wonder what the problem can be?

I received my personal copy of VE9SRB's file and verified the information for myself and and I am pleased to say that I DID NOT HAVE TO JOIN ANY CLOSED and COMPANY OFFICER CONTROLED LIST to receive this file.

I do not see any Need for the use of ANY CLOASED and COMPANY OFFICER CONTROLED LIST to disseminate information that is being freely debated on this OPEN and UNCENCORED Newsgroup.
It is my personal opinion if you use this newsgroup to publicize your VERSION of the MI2 as you have obviously done then please at least have the common courtesy to publicly and freely with NO STRINGS ATTACHED provide YOUR VERSION in a OPEN and UNCENCORED forum just like Steve VE9SRB has done.
If you are having email problems I will be more then glad, if VE9SRB has no objection to snail mail you a printed copy.
--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?
In article <20000924210220.25326.00000499@ng-da1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
"sideband" <sideband@cac.net> wrote in message
news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
.
>
> But the advice is still sound. In fact, Steve, if you want, you may
> email it to me as well. I'll keep copies of the message on three or
> four of my machines, so if there's ever any question as to the origin
> or the time of the file, I'll have the proof here. Post it to the NG
> at the same time, so there's no question.
>
> Just my two cents
>
> -SSB

>SSB:
>
>I would be happy to send you a copy of the file. I want to check it
>out just to verify that there are no problems with it. I'll send it
>along shortly.
>
>73
>Steve, VE9SRB
>
>
>
> Hi Steve--
>
> I am still awaiting the file you publicly offered on this NG.
>
> I will also remind you (again) that MI2 and other fractal antenna
files are
> available to members of the fractal antenna list.
>
> Again, to remind on joining, do:
>
> fractalantenna-subscribe@egroups.com
>
> 73
> Chip N1IR
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3335. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 03:50:00 UTC
From: k3bu@aol.com
Message-ID: <20000924235000.24741.00000869@ng-cl1.aol.com>
Source record: 179740

>
>It sured seemed that everyone had a good time. Ran outta burgers--that was
>the
>only problem.
>
>Another one in the Spring.
>
>Because the open house is now over by more than a week, and no one has
>anything
>relevant to say on it, this thread is closed.
>
>73
>Chip N1IR
>
>

S'planation:

Cheap welcomed himself. Opened the fridge, and there were no hamburgers, sooo sorry! "We ran outta them."

He bought one more hamburger and is aging it for the spring closed "open house".

No one besides multiple frucktenna personalities was there, there will be no postings and the list is top secret. Freak was talking to himslef and applauding himself, then he ate the empty hamburger bun, drank the water from the wine bottle. Got smashed, called police that stupid hams are invading his open house which is closed. Everybody had good time.

A&P put out prize for the report from the "open chirp house" or anyone showing proof of being there. Due to huge success, the house will be closed again in the spring.

Now he is preparing to wipe everybody out in the contests. Watchout for this superhuman freaky contest machine! Just don't come close to his frequency, he will sue you. FCC is already on the red alert and prowling through your backyards with field strength meters and will be guarding his freakvency.

You gotta know how to read the freaky stuff.

bada BYm
forget the R for savings

3336. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 04:44:14 UTC
From: jnrv1978@aol.com
Message-ID: <20000925004414.08958.00000280@ng-ff1.aol.com>
Source record: 179743

I really do appreciate all the tips you all have given. I think I will put up the B&W to give it a try and because a friend was kind enough to loan it to me. I think I will look for an antenna tuner and get a spool of wire, some insulators and go to town. Anyone got an antenna tuner they want to sell reasonable to a starting out ham on a budget? Thanks again! Jon.

3337. Re: How do I make a ground in solid rock?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 05:00:28 UTC
From: sideband@mindspring.com
Message-ID: <39CEDBEC.F3A7A0BF@mindspring.com>
Source record: 179744

The spike or the head? My guess is the head is already wearing a foil hat.

Gilbert Mouget wrote:

> Sun, 24 Sep 2000 04:08:57 GMT dans l'article
> <t7fz5.27645$pu4.2660322@typhoon.ne.mediaone.net>
> l'honorable Chuck O'Neal <coneal@ultranet.com> escrivit :
>
> :A spike through a fractal head would do....
> :
>
> You must wrap it in aluminium foil before.
>
> --
> Gilbert.

3338. variometer for ant. tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 05:17:43 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <XdBz5.246491$i5.3358688@news1.frmt1.sfba.home.com>
Source record: 179745

Roller inductors are somewhat expensive, and possibly difficult to homebrew.
I have not seen anyone build a variometer for a tuner. Seems like it would
be simpler to construct. It would need a lot of gear reduction to get a
suitable tuning rate, but that aside, it seems workable. Any thoughts?

73
Mike Camp ki7fq
El Cerrito, CA.

3339. Re: Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 05:20:23 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39CEE097.5E94@wt.net>
Source record: 179746

CAM wrote:
>
> suestec wrote:
> >
> > Greetings to all who read this!
> >
> > I am considering building a dipole with a pair of
> > 20 meter HF mobile whips and feed it with
> > 450 ohm feed line so I could use the configuration
> > to 10 meters.
> >
> > How effective was this antenna?
>
> It would be better to use 10m mobile whips. Using 20m
> Hamsticks (for instance) on 10m may result in self-resonance,
> a lossy condition where the inductance and distributed
> capacitance pass energy between them resulting in unacceptable
> losses. I don't know exactly what the self-resonant frequency
> of a 20m Hamstick is. Does anyone know?

I don't know for sure, also the designs vary quite a bit. But I do have one 20m hamstick that is nearly resonant on 20m with no stinger at all. I'd consider that pretty much self resonant. This is bad news. But not all are designed like that. "Actually, only the worst are". So obviously, I never use it as is on 20m. I do add a 3 ft stinger to it, and use it on 40m where it works great. But the using 10m sticks instead of 20m sticks a good idea regardless of whether the sticks are self resonant. It's much better to use the stingers capacitance to tune rather than more helical windings. The stinger needed to tune the average 10m stick to 20m will be appx 2 ft long."That's what is is on my all band ant using a 10m stick as the base". If the sticks being used have no ready way to connect the stinger, you can use the small hose clamps at the auto parts store. They are perfect size for this."Use 2 to keep the stinger straight". On the helical sticks it's always better to use the longest stinger you can get away with. A stick with mostly all windings and little or no stinger whip a lousy antenna. Also, to make the best antenna using 10m sticks, you want to find the type that maximise the windings near the top, as you would a normal lumped coil. This type design much better than one where all the windings are equal spaced down the stick. Not all sticks created equal..:< MK

--
http://web.wt.net/~nm5k

3340. Re: Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 06:15:28 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CEED80.22FE8879@oio.net>
Source record: 179747

suestec wrote:
>
> Greetings to all who read this!
>
> I am considering building a dipole with a pair of
> 20 meter HF mobile whips and feed it with
> 450 ohm feed line so I could use the configuration
> to 10 meters.
>
> Questions to ponder:
> Has any one on this reflector ever constructed a
> contraptions as this?
> How effective was this antenna?
> Would 300 ohm feed line have been a better choice?
> Was a balun needed?
>
> Thanks in advance
> Greg, K3ANG

Greg,
It ought to work. If your not 'strapped' for space,
why not just use a 20 meter dipole? Much simpler...
'Doc

3341. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 06:17:28 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39CEEDF8.8DAA9775@oio.net>
Source record: 179748

Phillip Sikes wrote:
>
> Hello to the group. I have been looking at the Radio Works Super Loop
> 80 and was wondering if anyone has had any experience with the
> antenna. My main interest is using it for 80M DXing so don't care too
> much about the other bands and how they react.
>
> 73 - Phil
> N7UX

Phil,
Ought to work as well as any. Follow directions.
'Doc

3342. Re: Antenna Stacking advice needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 06:30:23 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <b+jFUFA$Dvz5EwV0@ifwtech.demon.co.uk>
Source record: 179750

Bruce Brackin wrote:
>Greetings - Have a 6 meter beam, 2 meter beam and triband vertical
>(6/2/70cm) I would like to get on common rotor mast. Looking for advice
>on seperation/spacing of these antennas. The 6M beam is 15' boom - 6
>element LP, hort. polarized. 2 meter is 12' boom -10 element yagi
>vertically polarized. Triband vertical has 3 radials - one long
>(counterpoise) for tuning 6 meter. Total wind load of all is about 4 sq
>feet.
>
>Have always heard and read the 1/2 boom length rule. Any difference on
>positioning vert polarized (2 m) over a horizontal one (6 m). Figure
>the vertical triband can be relatively close to 2m beam because of short
>radials/counterpoise. Don't want to use a mast any longer than I need
>to.

There's information on my web site.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3343. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 06:48:58 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39cef37d.101473678@news.azstarnet.com>
Source record: 179751

On Sun, 24 Sep 2000 19:56:01 GMT, 2w8ji@contesting.com (Tom W8JI) wrote:

>
>Someone e-mailed me this, but he wants to remain unnamed to the
>general public:
>
>I didn't want to get into a clusterfight on the NG with this one, and
>thot
>you might get a chuckle. You can quote me without attribution <BG>.
>
>After the Ufer experience on the NG, of last year, several of us
>interested
>in high-energy discharges wanted to find out whether vaporizing metal
>inside
>concrete could rupture the surrounding jacket.
>
>Back in June, we experimented to find out how many joules it took to
>vaporize a 2ft length of #10 copper on discharge. My ears are still
>ringing <G>. Nice plasma!

So how many joules does it take and is the number representative a lightning
discharge?
>
>We made a number of I-shaped concrete (5-bag, crusher-run) pieces,
>about
>a
>foot long and an inch and a half square, with pieces of #10 copper
>wire
>in
>their centers. Cured 'em properly.

Not the same as a cubic yard+ of concrete constrained in the Earth. Was the
experiment also run using 1/2" rebar?
>
>The results give a whole new meaning to 'fragging'. The largest
>chunk
>of
>concrete we could find was maybe a half inch across. The devastation
>was
>complete. Ain't no pictures cuz the chunk above took out the camera
>:-(
>
>Sure beats the tantalum-capacitor substitutes I've been using for M80s
>and
>blasting caps on halloween and other occasions. The noise

>approximates
>a
>20-pound cannon shot -- I couldn't tell the difference.
>
>I can see why someone might be nervous about depending totally on a
>Ufer
>ground for lightning protection. It didn't take all that many joules
>to
>frag the concrete.
>
>End....
>
>Still looking for tests or data.

Me too.

Regards,

Wes
>
>73 Tom

3344. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-25 09:47:39 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qmsdb$2a$1@slb0.atl.mindspring.net>
Source record: 179749

Thread:

Chip wrote...

[snip]
> benefits the publisher; certainly not the author. And universities now
make
> major distinctions between peer reviewed and non-peer reviewed articles.
So
> essentially there is no reason for a professional to publish in a ham
magazine
> anymore, unless there is an option of peer review.
[snip]

I am surprised at Chip's apparent lack of perspective on this!

I might point out that all "reputable" Universities have ALWAYS made major distinctions between peer reviewed and non-peer reviewed articles. All professional and academic authors KNOW that publications in amateur magazines are accorded little or no professional or academic recognition! What?

Authors publish in ham magazines for hams, hobbyists, experimenters and others involved in an avocation, not to build a professional publication list for their professional or academic CVs or resumes.

Professional journals, transactions, etc... are for professional or academic peer reviewed publications. i.e. IEEE Proceedings, IEEE Transactions on Antennas, IEE publications, ACM publications, Nature, SIAM, Journal of the Franklin Institute, etc...

Ham magazines and other hobby publications are for those who are pursuing an avocation not a vocation!

Everyone knows this.

This is not a discredit to ham or amateur oriented publications, rather to the contrary. Such articles may be of the highest calibre, however they are usually not subject to professional, academic, scientific, or engineering peer review. So what? That's not the intent.

But let's not go around making allusions or claiming that such publications are peer reviewed and attempting to use them to establish peer review style credibility with such publications. It just ain't so!

Ham and other hobbyist magazines often contain publications by professionals and academics, usually written by professionals or academics who are also amateurs, but for the purpose of informing and communicating with other

amateurs and hobbyists, not for establishing professional or academic credibility among professional peers.

Everyone knows this, except perhaps for poor ole Chip N1IR.

What?

Peter K1PO

3345. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D099DC.310B87A2@hiwaay.net>
Source record: 179319

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >Wrong.
> >
> >
> >
> >
> >
> >
>
> Could you please compare the relevant attribute of the 6HF5 to what you believe
> to be (or have been) better?
>
> 73
> Chip N1IR

3346. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <Xg1A5.88288$i5.3195718@news1.rdc2.on.home.com>
Source record: 179320

It's Wayne again
Thanks very much for the practical advice. I have the antenna book but it's got a lot of theory and they don't talk about this sort of thing.
I have some more 'dumb' questions. I have eavestroughing all around the house. Is there a way to make good use of this(ie vertical)? How high off the roof do I have to get a dipole or inverted v to minimize the effect of the eavestrough? I was planning on erecting the dipole along the edge of the roof directly above the eave since the roof comes to a point at the center. (cottage roof rather than gable)
tnx
Wayne
ve3 gqx

3347. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d0a35a.14525058@news.akorn.net>
Source record: 179321

On 26 Sep 2000 12:05:38 GMT, fractenna@aol.com (Fractenna) wrote:

>Please present published data which reveals that a fractal antenna has been
>used--and indeed is a so-called property-- to generate and diddipate heat.

Diddipate? I'm not sure I understand that term.

73 Tom

3348. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A409.CF4C1220@hiwaay.net>
Source record: 179322

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >The 6LW6 had an anode that folded as much metal as possible into a
> >small area, giving the ability to transfer lots of heat.
> >
> >It amazes me we have the same technology in antennas.
> >
>
> Hi Tom,
>
> Please present published data which reveals that a fractal antenna has been
> used--and indeed is a so-called property-- to generate and diddipate heat.
>
> So far, you have not been able to present any support for the numerous
> assertions you have made, at this count almost a dozen in the last day.
>
> 73
> Chip n1IR

3349. Re: FRACTAL QUAD warrning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A463.CF198E49@hiwaay.net>
Source record: 179323

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >
> >
> >
> >Fractenna wrote:
> >
> >> >As one who is in the squirt gun category in contests (QRP at <20 dBm ERP
> >in
> >> >the CW SS), I can attest to this. If someone appears to be a sharp op, I
> >> >will wait out the pileup until I get through; if he or she is efficient,
> >> >there will be an opening sooner rather than later. If the op is fumbling
> >> >around at all, I move on to the next op, hoping to maybe come back later.
> >> >The first one will get me more often than the second one.
> >> >
> >> >Now, speaking of contests, Chip, you were looking for a challenge. Would
> >> >you care to take me on for points per watt in the 2000 ARRL CW
> >Sweepstakes?
> >> >I won't call you a chicken if you prefer a different type of operating and
> >> >don't accept. :-)
> >> >
> >> >73,
> >> >Ed Hare, W1RFI
> >>
> >> I appreciate the offer. The problem is that I am not a good CW op. Even if
> >I
> >> was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS
> >happens

> >> on weekends where I have to visit and help relatives.
> >
> >>
> >How noble.You toss out challenges by the megabyte but you won't buy into one.
> >Besides you got yourself an automatic excuse slip from the BU Dean of
> >Socialist
> >Blather, you have to feed the dawg too so quite obviously you can't possibly
> >run
> >against Ed in SS.
> >>
> >
> >> 73
> >> Chip N1IR
> >
> >>
> >w3rv
> >
>
> Brian--
> Would you prefer that I lie and say that I am Go'ds Gift to CW and can't deign
> to compete against him?
>
> 73
> Chip N1IR

3350. Re: FRACTAL QUAD YAGI-warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A48B.11D659C0@hiwaay.net>
Source record: 179324

Fractenna wrote:
>
> >>I'd just love to see him put one of those FQYs on 20 on Saturday morning in
> >the CQ
> >>WW . . The only "runs" he'd generate would be in his pants.
> >>>
> >>w3rv
> >
> >.................you mean panty hose??
> >
>
> Tom,
>
> I am a straight man. I have no fetishes or bizarre behaviors.
>
> Please. Keep such fantasies to yourself.
>
> 73
> Chip N1IR

3351. Re: N1IR warning

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A4B4.B4D1AA14@hiwaay.net>
Source record: 179325

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >"Down the RRAA Band" Hisself clearly stated that he's running a JRC JST 245.
> >Very
> >nice little HF xcvr actually, but it would go up in a ball of flames and
> >smoke if
> >it ran much more than 100w out. Whatta mindless dipshit!
>
> Mine puts out 150 watts. I haven't had to replaced the PA transistors yet...
>
> NC

3352. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d0a411.14708922@news.akorn.net>
Source record: 179326

On 26 Sep 2000 12:12:29 GMT, fractenna@aol.com (Fractenna) wrote:

>IMHO, your public post is an efort to make me look like something I am not. and
>makes you look, well, let each make their own assessment.

You seem confused. Let me give you an example of a post that makes an
effort to have you you look like something you are not.

Example:
You are a brilliant helpful friendly person who is well liked by all
who he meets.

Hope this helps!
73 Tom

3353. Re: BETTER be warned

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A4EF.D4AB2A99@hiwaay.net>
Source record: 179327

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >
> >I'm not at all surprised at Chip's inability to distinguish between
> >"dislike" and "hate".
> >
> >(My statement was: "I've come to dislike the person himself, not just
> >what he
> >says. This isn't just because of his rude responses to me, but also
> >because of what he's done to everyone else he encounters here.")
> >
> >I can't think of anyone I hate. I do dislike bullies, and adults who act
> >in an insulting, rude, arrogant, or childish fashion, and Chip does all
> >of these. There are a very few people I know in this category, since I'm
> >generally able to simply avoid them. I refuse, though, to turn over this
> >newsgroup to someone who fits this description, so it looks like Chip is
> >someone I've got to put up with. And conversely.
> >
> >Roy Lewallen, W7EL
> >
> >Fractenna wrote:
> >>
> >> I see no reason to go by his offer. Roy has now publicly gone on record as
> >> saying that he hates me. . .
> >
>
> Am I incorrect in understanding your MAGNTITUDE of dislike?. You didn't say 'I
> dislike this' for example. You asserted that you strongly dislike ME.

> Personally.
>
> Would you wish me to beg your forgiveness for some bogus violation?
>
> IMHO, your public post is an effort to make me look like something I am not. and
> makes you look, well, let each make their own assessment.
>
> But please: I am not unhappy to severe all contact with you personally, based
> on your embarrassing and vile response. That would seem for the best
>
> Nathan Cohen, Ph.D.

3354. Re: BETTER be warned

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A53A.E6A85341@hiwaay.net>
Source record: 179328

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.

Fractenna wrote:
>
> >Hi OM,
> >Thanks for asking I feel quite well come to think of it, I share your
> >concerns but as you know, the rules on disclosure are quite clear,
> >absolutely clear.
> >
> >I am truly overjoyed to see by your answer that you have finally
> >received your own PERSONAL and NOT for COMMERCIAL USE copy of the
> >VE9SRB EZNEC MI2 Design, I am truly happy for you that you did not have
> >to wait for the snail mail as I understand that it tends to get a bit
> >slow this time of the year in the New England area.
> >I am truly Glad that you have made the correct decisions to not only
> >publish your version of the MI2 in that CLOSED and Company OFFICER
> >CONTROLED LIST, I am sure that all of the readers of this news group
> >await your OPEN PUBLICATIN in this world wide and OPEN newsgroup with
> >true enthusiasm as winter approaches.
> >
> >Hope that this helps.
> >
> >And may God Bless.
> >
> > 73's Steve
> > oo
> > (__)
> > AB2ET
> > "I bet Two Extra "Terrestrials"
> > Aperture Engine is that a

> > singularity detector?In article
> >
> ><20000925065239.09047.00000325@ng-ff1.aol.com>,
> > fractenna@aol.com (Fractenna) wrote:
> >>Hi Steve--
> >>
> >>Can you tell us what an aperture engine is, and who came up with it?
> >>I'm sure you feel it is important to explian given that it is
> >>important to put in all your posts.
> >>
> >>My rules on MI2 are clear.
> >>
> >>73
> >>
> >>Chip N1IR
> >>
> >>
> >> >Hi OM,
> >> >I find this a very strange statement, did you actually send a email
> >to
> >> >VE9SRB requesting a copy for your your own personal and not for
> >> >commercial use, I just wonder what the problem can be?
> >> >
> >> >I received my personal copy of VE9SRB's file and verified the
> >> >information for myself and and I am pleased to say that I DID NOT
> >HAVE
> >> >TO JOIN ANY CLOSED and COMPANY OFFICER CONTROLED LIST to receive this
> >> >file.
> >> >
> >> >I do not see any Need for the use of ANY CLOASED and COMPANY OFFICER
> >> >CONTROLED LIST to disseminate information that is being freely
> >debated
> >> >on this OPEN and UNCENCORED Newsgroup.
> >> >It is my personal opinion if you use this newsgroup to publicize
> >your
> >> >VERSION of the MI2 as you have obviously done then please at least
> >> >have the common courtesy to publicly and freely with NO STRINGS
> >> >ATTACHED provide YOUR VERSION in a OPEN and UNCENCORED forum just
> >like
> >> >Steve VE9SRB has done.
> >> >If you are having email problems I will be more then glad, if VE9SRB
> >> >has no objection to snail mail you a printed copy.
> >> >--
> >> > 73's Steve
> >> > oo
> >> > (__)
> >> > AB2ET
> >> > "I bet Two Extra "Terrestrials"
> >> > Aperture Engine is that a
> >> > singularity detector?

> >> >In article <20000924210220.25326.00000499@ng-da1.aol.com>,
> >> > fractenna@aol.com (Fractenna) wrote:
> >> >"sideband" <sideband@cac.net> wrote in message
> >> >news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
> >> >.
> >> >>
> >> >> But the advice is still sound. In fact, Steve, if you want, you may
> >> >> email it to me as well. I'll keep copies of the message on three or
> >> >> four of my machines, so if there's ever any question as to the
> >origin
> >> >> or the time of the file, I'll have the proof here. Post it to the
> >NG
> >> >> at the same time, so there's no question.
> >> >>
> >> >> Just my two cents
> >> >>
> >> >> -SSB
> >> >
> >> >>SSB:
> >> >>
> >> >>I would be happy to send you a copy of the file. I want to check it
> >> >>out just to verify that there are no problems with it. I'll send it
> >> >>along shortly.
> >> >>
> >> >>73
> >> >>Steve, VE9SRB
> >> >>
> >> >>
> >> >>
> >> >> Hi Steve--
> >> >>
> >> >> I am still awaiting the file you publicly offered on this NG.
> >> >>
> >> >> I will also remind you (again) that MI2 and other fractal antenna
> >> >files are
> >> >> available to members of the fractal antenna list.
> >> >>
> >> >> Again, to remind on joining, do:
> >> >>
> >> >> fractalantenna-subscribe@egroups.com
> >> >>
> >> >> 73
> >> >> Chip N1IR
> >> >>
> >> >>
> >> >
> >> >
> >> >Sent via Deja.com http://www.deja.com/
> >> >Before you buy.
> >
>

> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.
> >
>
> Hi Steve--
>
> Can you tell us what an aperture engine is, and who came up with it?
> I'm sure you feel it is important to explian given that it is
> important to put in all your posts.
>
> 73
> Chip n1IR

3355. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d0a4e6.14921729@news.akorn.net>
Source record: 179329

On 26 Sep 2000 12:26:22 GMT, fractenna@aol.com (Fractenna) wrote:

>Too bad I didn't have some geraniums up! Would have had a pink tornado!
>
>73
>Chip N1IR

You could have just put some of your silk underware outside. Although
it wouldn't sm,ell like the flowers it would be the same basic shade
of pink.

3356. Re: ATTN: be warned

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0A5A9.D940A604@hiwaay.net>
Source record: 179330

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned.
Fractenna wrote:
>
> >
> >On Tue, 26 Sep 2000 02:35:33 -0500, Mark Keith <nm5k@wt.net> wrote:
> >
> >>Roger Halstead wrote:
> >
> >snip
> >
> >Sorry folks. False alarm. I checked NWS records and they reported NO
> >tornados in Chip's area the day in question, not even F1's
> >
> >Damage reports that day to the weather service from that area was $0
> >
> >Looks like it was an imaginary F1 tornado that the fractal survived.
> >
> >73 Tom
> >
>
> No; it was an F1 tornado.
>
> Sorry Tom.
>
> You are telling a fib.
>
> 73
> Chip n1IR

3357. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d0a555.15032512@news.akorn.net>
Source record: 179331

On 26 Sep 2000 12:16:00 GMT, fractenna@aol.com (Fractenna) wrote:

>Tom,
>
>I am a straight man. I have no fetishes or bizarre behaviors.
>73
>Chip N1IR

You claim Sagan made a girl personna, Ellie, in your image in his book
Contact because "she reminded Carl of you".

Of course you also claim you are a helpful person, and one of the
worlds top antenna design engineers.

73 Tom

3358. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <682A5.120680$xg1.1048786@news1.rdc1.sdca.home.com>
Source record: 179332

Yes, and it does bring memories of short path 20m openings to North America.

de wombat
AR SK

click

Reg Edwards wrote in message <8qpsi8$s29$1@plutonium.btinternet.com>...
>By reading some of the articles displayed on this newsgroup,
>anyone (that's most of us) who takes an interest in human
>written behaviour can learn more about the dozen or so
>persistent tormentors than about the single solitary
>tormented.
>--
>--
>Regards from Reg, G4FGQ
>For free radio design software go to:
>http://www.btinternet.com/~g4fgq.regp
>--
>
>

3359. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D09B68.FBB2E455@dvol.com>
Source record: 179333

Roy Lewallen wrote:

> mono-ton-ic, adj. [first known English use 1797] . . . having the
> property either of never increasing or never decreasing as the values of
> the independent variable or the subscripts of the terms increase.
>
> -- Merriam Webster's Collegiate Dictionary.
>
> Hence, an impedance that increases monotonically with frequency is one
> whose impedance keeps going up and never goes down.

>
Entropy balun? . . . dS/dQ . . . *now* I know what Q is really all about . .

>

> This isn't a
> particularly unusual word -- you'll find it used often in technical and
> mathematical articles and texts.

>
I've probably trudged thru about 200 feet of 'em over my engineering career
and Roy I honestly never heard/read the term before.
>

> I highly recommend getting a dictionary. They're very useful in the
> process of communicating.

>
Got two of 'em staring me in the face on the shelf over the monitor. Too
heavy to deal with at that hour and I couldn't find my glasses again.
>

> If you don't like books,

>
Ouch! Low blow! . . Got 110 feet of packed bookshelves - and that's just
right here in the living room.
>

> you can get it on a
> CD-ROM for a modest price.

>
Sore point with me. Last I read Her Majesty's "official" Oxford dictionary
contains something like 800,000 English language words and thier assorted
definitions. These weenie $20 consumer CD dictionaries only store around
40-50,000 words. Do you perchance know of any more comprehensive CD

dictionaries? I usually have one of the weenies on the hard drive but have not dumped one into this new computer in hope that I can find a decent one for once.
>

> Roy Lewallen, W7EL
>
>

The real bottom line here being I oughta gone to bed a half hour before I pumped out my inane post.
>
Toodles.
>
Brian Kelly w3rv

3360. Re: RADIOWORKS HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Allan Koenigsberg <ae2j@bellatlantic.net>
Message-ID: <39D0B25C.392749B@bellatlantic.net>
Source record: 179334

www.radioworks.com

Miguel Costa wrote:

> Can anyone tell me...if the radioworks mail is w4thu@radioworks.com or it
> has changed....because they do not answer my requests of ordering....:-(
>
> thaks.
>
> CT2GUX

3361. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Allan Koenigsberg <ae2j@bellatlantic.net>
Message-ID: <39D0B44D.50891F41@bellatlantic.net>
Source record: 179335

It means that the balun can't sing worth a damn.. When I went to school,
they would call you a 'listener' when you went to singing class.

Brian Kelly wrote:

> Roy Lewallen wrote:
>
> > with its impedance increasing monotonically with . . .
>
> >
> There's a keeper! What the (bleep!) is "monotonically"???
> >
> w3rv

3362. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Uz2A5.19$ai4.81672@news.ntplx.net>
Source record: 179336

Tom W8JI <2w8ji@contesting.com> wrote:

> The TV set has a defective deflection yoke, or circuit problem,
> allowing the horizontal and vertical deflection windings to be driven
> with the same sweep signal.

While possible, that is probably quite unlikely. I belive that if the V winding was shorted to the H winding, the circuitry could not drive both windings to full screen.

In the case I mention, the vertical winding on the deflection yoke was open and the yoke was loose on the CRT, rotated by 45 degrees. :-)

Now, back to rraa. :-)

73,
Ed Hare, W1RFI

3363. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <19124-39D0B008-7@storefull-115.iap.bryant.webtv.net>
Source record: 179337

Bill, W0IHY wrote:
"My basic opinion, regarding this individual, is that in my limited contact I have treated him with respect, and he has treated me with respect in return."

Exactly my experience. Bill`s analysis of the atmosphere generated in this newsgroup rings true, too.

Sometimes it is productive to tolerate alien behavior of some individuals and improve harmony by acknowledging their worthwhile contributions and ignoring their irritatations.

I find it difficult to practice what I`m preaching here.

Best regards, Richard Harrison, KB5WZI

3364. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D0A2DA.CF6B73B6@dvol.com>
Source record: 179338

Jim Pennino wrote:

> > Fuggit all, I'm on my way to Linux. This is ridiculous.
> >>
> > b.
>
> A good idea.
>
> You can download Star Office from www.sun.com for free and deal with those
> that persist in useing Microsoft word/excell/etc.
>
> You can download twpsk from aintel.bi.ehu.es/psk31.html and have 3 receive
> windows in addition to the main window.
>
> You can run real news readers, etc.
>
> The only downside is there is no Linux version of EZNEC.

That's the big problem with Linux at this point in it's development. I churn my daily bread via doing industrial machine design via a bunch of industry-standard high-end Windoze apps like CAD and FEA and many others of that ilk. No such things for Linux or the MAC O/S at the professional levels. Yet. I'll get into Linux on a casual basis, maybe run all my Internet activities on Linux but I can't get serious about it.

>
>
> Jim Pennino

>
Brian, w3rv

3365. H.F. Mobile Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Gary Rotter <GR120994@exchange.SanDiegoCA.ncr.com>
Message-ID: <39d0cb4a$1@rpc1284.daytonoh.ncr.com>
Source record: 179339

Which H.F. antenna would work better on 20-10 meters ?

A Yaesu ATS-100 mounted on the roof of a car with a mag mount or High Sierra Screwdriver antenna mounted on the rear bumber.

3366. Reviewers wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qqkru$6rq$1@iac5.navix.net>
Source record: 179340

I am seeking peer reviewers to peruse my fractal antenna article prior to submission for publication. If interested, please drop me an e-mail.

--
Fred Hambrecht
http://w4jle.com

3367. Look for a top cress 2m antenna plan

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Pierre BERNARD <fg1de@wanadoo.fr>
Message-ID: <8qqlgknok1@wanadoo.fr>
Source record: 179341

hi,
I am looking for a Top Cress Antenna for 2m band.

Somebody can help me ???

thks

3368. Re: H.F. Mobile Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D0DB1C.4AB0@wt.net>
Source record: 179342

Gary Rotter wrote:
>
> Which H.F. antenna would work better on 20-10 meters ?
>
> A Yaesu ATS-100 mounted on the roof of a car with a mag mount or High Sierra
> Screwdriver antenna mounted on the rear bumber.

For 20-10 about anything will do ok. Between those two, I'm just
guessing, but I'd probably bet on the screwdriver. I'm not really
familiar with the yaesu ant. MK
--
http://web.wt.net/~nm5k

3369. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D0DEF3.C6336410@eznec.com>
Source record: 179343

Yet I tried treating him with respect on this newsgroup and was treated rudely. Ed tried treating him with respect and also received none in return. Steve's protracted attempt to be respectful, objective, and fair was met with evasion and insults.

My own experience was that Chip has been amiable and respectful -- until I questioned something he said. At that point, he decided that I had an ulterior motive, was out to get him, and was therfore deserving only of ridicule and rudeness. This is in stark contrast to an interchange of information, ideas and viewpoints among professionals or even rational amateurs, and has been his standard response to nearly any disagreement or even requests for additional supporting information.

We'd all prefer to have objective, technical discussions -- at least most of us would. I'm anxiously waiting for you gentlemen to show us by your example how to engage Chip in a mutually respectful discussion without blindly agreeing to everything he says. I for one will eagerly follow your example.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Bill, W0IHY wrote:
> "My basic opinion, regarding this individual, is that in my limited
> contact I have treated him with respect, and he has treated me with
> respect in return."
>
> Exactly my experience. Bill`s analysis of the atmosphere generated in
> this newsgroup rings true, too.
>
> Sometimes it is productive to tolerate alien behavior of some
> individuals and improve harmony by acknowledging their worthwhile
> contributions and ignoring their irritatations.
>
> I find it difficult to practice what I`m preaching here.
>
> Best regards, Richard Harrison, KB5WZI

3370. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <elm1tssj6hge85t3a6f1v4vb280iklvaa5@4ax.com>
Source record: 179344

On Mon, 25 Sep 2000 22:03:13 +0100, "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
>Gary, are you quoting measurements reported by other people
>or are your statements on conductivity and dielectric
>constant your own determinations ?

These are numbers gleaned from the literature. According to the
articles I mentioned, it is very easy to make very large errors when
attempting these measurements. Fairly large voltages (greater
than 60 volts) and currents are used on standard size specimens
(100 mm length and 50 mm diameter in a specified ASTM fixture)
to get good values for DC conductivity. This is necessary because
of polarization potentials in the material. You can't just stick your
multimeter leads on a chunk of concrete and expect the readings
to be meaningful.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3371. Re: H.F. Mobile Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D0DF3A.48656865@oio.net>
Source record: 179345

Gary Rotter wrote:
>
> Which H.F. antenna would work better on 20-10 meters ?
>
> A Yaesu ATS-100 mounted on the roof of a car with a mag mount or High Sierra
> Screwdriver antenna mounted on the rear bumber.

Gary,
There's probably not a lot of difference between the two
antennas, in them selves. The two mounting locations would
make a difference! the mag-mount idea is very marginal for
either of these two, so you might put a 'leash' on the thing!
... or watch the rear-view mirror.
'Doc

3372. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D0E102.63874E8D@eznec.com>
Source record: 179346

I really like the Collegiate edition. It has a much more complete selection of words than a lot of others, without being overly bulky like an Unabridged. I don't recall encountering any word used in prose or conversation I can't find there (although admittedly I read very little heavily literary prose). I do occasionally come across a word in a crossword puzzle that's not in there. That particular edition is available on CD-ROM. Looking up a word in it should be no more physically taxing than posting an email message.

Roy Lewallen, W7EL

Brian Kelly wrote:

> . . .

> Sore point with me. Last I read Her Majesty's "official" Oxford dictionary
> contains something like 800,000 English language words and thier assorted
> definitions. These weenie $20 consumer CD dictionaries only store around
> 40-50,000 words. Do you perchance know of any more comprehensive CD
> dictionaries? I usually have one of the weenies on the hard drive but have
> not dumped one into this new computer in hope that I can find a decent one
> for once.

> . . .

3373. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <8qqniohbs1@slb6.atl.mindspring.net>
Source record: 179347

Richard Harrison <richardharrison@webtv.net> wrote in part:

>
> I find it difficult to practice what I`m preaching here.

Not to worry. Take comfort in these words.

"I don't practice what I preach because I'm not the kind of person I'm
preaching to."
- J. R. "Bob" Dobbs

--
It came from C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
Wallowing in technology since 1956.

3374. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <6f+dMOAXgO05EwbJ@ifwtech.demon.co.uk>
Source record: 179348

Brian Kelly wrote:
>Sore point with me. Last I read Her Majesty's "official" Oxford dictionary
>contains something like 800,000 English language words and thier assorted
>definitions. These weenie $20 consumer CD dictionaries only store around
>40-50,000 words. Do you perchance know of any more comprehensive CD
>dictionaries?

The Oxford English Dictionary is at www.oed.com - where else?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3375. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39d0cf9d.223379760@news.azstarnet.com>
Source record: 179349

On Mon, 25 Sep 2000 21:10:12 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Wes, N7WS wrote:
>"Sure. But are you suggesting that once a tower has been hit by
>lightning it should be taken down because all of the rebar in the
>concrete base has been vaporzed? <g>"
>
>Oh, no! The concrete will remain strong in compression. The tower should
>come down because the lightning has destroyed the temper of the tower
>steel leaving only the strength of a damp noodle. <g>
>
>Best regards, Richard Harrison, KB5WZI

You point up something that I have a conceptual problem with.

How come this big metal thingee (the tower) can stand up there above ground and take all sorts of lightning hits without structural damage but the same steel, when encased in concrete and buried, somehow vaporizes and explodes the concrete.

Now I do not dismiss the eyewitness reports of damage to concrete due to lightning hits that have been made by posters to this forum. If they say it happened, then it happened. I just have not seen a convincing (to me anyway) explanation put forth.

So, accepting as fact that lightning induced damage to concrete tower bases has occurred, I offer two possible explanations, **simply as food for thought**.

1) I have proposed this before: the strong magnetic field produced by the huge strike current, causes physical movement of the structure. (note: 100s of thousands of TOW missiles have been assembled using Magnaforming to deform a (non-magnetic yet) aluminum section into an annular groove in a steel rocket motor housing.)

I confess that I don't have the intellectual capacity to analyze this idea; maybe something for a PhD candidate to look into.

2) It isn't heating and vaporizing of the free water (if any) in the concrete but the breakdown of the entrapped air. Similar to (exactly equivalent to?) partial breakdown in insulation systems.

Once again, just food for thought.

Regards,

Wes N7WS

3376. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39dfcca7.347500719@news.seanet.com>
Source record: 179350

On Mon, 25 Sep 2000 21:03:27 -0700, Donaly <dtdonaly@pacbell.net>
wrote:

>Hi, Richard,
> my old encyclopedia says that the historical Roland
>was killed by Basques in the Pyrenees, poor fellow, not by Saracens
>in Roncesvalles. My sympathies have always been with the Saracens.
>(Visigoths have never been much thought of by historians,
>nor by me, nor, I might add, by the Moors.)

Reading the original is much more satisfying than the dry facts of an encyclopedia. As for the Moors, they are taken care of by that other great work "The Poem of the Cid." If we were to jump forward in time (slightly) we would find a more appropriate tale that correlates well here: Cervantes' Don Quixote.

>At any rate, the reason I responded to Orlando, was that, fighting
>bears, dragging a dead horse around with one hand while uprooting
>trees with the other, and carrying on in a state of complete hysteria
>and wooden wroth is what I feel like doing every time I see a
>post dealing with fractal antennas that:
> 1. Assumes that fractal shapes are optimal in some sense
>without either explaining or proving it.

This is because the work has been derivative. The "scholars" have only found examples by discovery. Given the amount of work in plowing through poor fractal designs (the metaphysical equivalent to uprooting trees), one after another, mental pictures might emerge where the researcher finds correlation, but this is tenuous at best, and given the paucity of discussion these suspect correlations appear to be strained too.

> 2. Relies on computer-derived numerical approximation techniques
>to "prove" one thing or another about something as amorphous and
>vague as a shape formed by an algorithm, that, if carried on forever,
>might produce something that very closely resembled the vague
>mathematical abstraction called a fractal.

Nothing has been proven, there is no basic or fundamental property enunciated that can provide for a position to defend. There are many observations made, certainly; however none of these constitute a science of the subject. You might expect a denouncement of this last statement, but I seriously doubt you will ever hear a compelling counter example.

So, to steal the march on that counter example, my work has shown correlation between the degree of complexity of design to the resonance of the design. There is nothing tied to any particular algorithm though, it is far simpler than that.

The employment of computers is simply the discovery process automated (which thus demystifies the bear strangling). What you are reacting against is the sanctimony that comes with some announcements. Strip out this excess baggage and you will find very little - but what you do find may be meaningful. Unfortunately this moment of Aha! is trounced by the messenger.

> 3. Doesn't make at least a non-mathematical attempt to
>explain why the current distribution on a so-called fractal shape
>is any better for producing a given far-field pattern than the
>current distribution on any other object, such as a dipole, or even
>a bronze mermaid.

This, again, is because such "winners" are found, not forecast. A non-mathematical attempt to explain would have to go back to the mental picture drawn during the process of sifting through the innumerable poor fractal designs. Again, fractals do not trump common sense nor experience.

I covered this many times with my critique of the k2. The common explanation for its properties is wholly unrelated to the beingness of fractal and I demonstrate that quite clearly with my competitive, simple design of the Flying H. All the mechanisms of gain for the fractal are the same for the Flying H. As Steve has pointed out, differences that amount to tenths of a dB have little merit in anointing the claims of fractals.

> 4. Expects a simple amateur like me to accept anything as
>truth without a detailed, and thorough explanation, replete with
>experiments, measurements, and even, where possible, a little
>diversion into -dare I type it?- mathematics.

I would be surprised if anyone accepts fractals on the basis of a detailed and thorough explanation (and so on). This would put anyone to sleep, I have at least 300 pages of such data that draws nary a word of discussion, so detail and thoroughness is obviously not the magic bullet. There was talk about the necessity of real, constructible designs. I provided several to which there was no response (here - the Army is interested tho'), so even this is obviously not the magic bullet either.

It is more than obvious that interest in fractals is not technological so much as comical. It is the parade of personality that keeps it on the midway. Without that, it would be another carny freak side-show. But this does disservice to freak-shows. One example from moviedom is Todd Brown's "Freaks" which at least had a moral (and one that works perfectly here with a dove-tail fit).

>
>Tom Donaly KA6RUH
>
>(P.S. Time to do as Tom Rauch does and put my straw through the
>screen and suck up some of Cecil's good whiskey - providing there's
>any left, of course.)

Hi Tom,

We might spend more agreeable time in the examination of the lives of 17th century gentlemen and their writings in their diaries (Pepys is my favorite - he also was Newton's editor for Principia). I am tempted to quote one of the "experiments" conducted by the Royal Society back then, it makes just as much sense as fractals, and was taken as seriously (and with as much doubt). It correlates to your expressed desire for Cecil's good whiskey, and also presents a solution for those who suffer from poor behavior.

73's
Richard Clark, KB7QHC

3377. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D0EE72.1A41E70@hiwaay.net>
Source record: 179351

Ian- thanks for the OED reference- it should have been obvious, but I
missed.
Of the American published, readily available- hard cover and CD- I like
the American Heritage. However- I keep the International unabridged,
(the last edition, not the current one) handy.

"Ian White, G3SEK" wrote:
>
> Brian Kelly wrote:
> >Sore point with me. Last I read Her Majesty's "official" Oxford dictionary
> >contains something like 800,000 English language words and thier assorted
> >definitions. These weenie $20 consumer CD dictionaries only store around
> >40-50,000 words. Do you perchance know of any more comprehensive CD
> >dictionaries?
>
> The Oxford English Dictionary is at www.oed.com - where else?
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

3378. Re: Ground Screen

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d0f548.35502559@news.akorn.net>
Source record: 179352

On Tue, 26 Sep 2000 13:43:49 -0400, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>These are numbers gleaned from the literature. According to the
>articles I mentioned, it is very easy to make very large errors when
>attempting these measurements. Fairly large voltages (greater
>than 60 volts) and currents are used on standard size specimens
>(100 mm length and 50 mm diameter in a specified ASTM fixture)
>to get good values for DC conductivity. This is necessary because
>of polarization potentials in the material. You can't just stick your
>multimeter leads on a chunk of concrete and expect the readings
>to be meaningful.

Any idea why polyphasors web site disagrees, and says Ufer grounds are
not enough?

73 Tom

3379. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39e0efec.356529352@news.seanet.com>
Source record: 179353

On Tue, 26 Sep 2000 10:37:55 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>
>We'd all prefer to have objective, technical discussions -- at least
>most of us would. I'm anxiously waiting for you gentlemen to show us by
>your example how to engage Chip in a mutually respectful discussion
>without blindly agreeing to everything he says. I for one will eagerly
>follow your example.
>
>Roy Lewallen, W7EL
>

Hi Roy,

Having them hoist their own petard will not make that bomb any less explosive. It is not a solution and is tacitly acknowledged when distancing is so obvious a factor in their congenial relations. However, such distancing is part and parcel to not responding to trolls. This is, in itself, a solution.

However, where is the support for the dis-enfranchised? It is one thing to pine away about the human condition and focusing on the possibility of finding redemption for the terrible sinner when there is the technical side of the correspondence that goes wholly neglected. This is simply the parade of personality supported by apathy and evidences a total lack of interest in the subject, but rapt attention in the comic.

No one's hands are clean in this matter.

73's
Richard Clark, KB7QHC

3380. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <H27A5.24$ai4.103113@news.ntplx.net>
Source record: 179354

Fractenna <fractenna@aol.com> wrote:

> >Now, speaking of contests, Chip, you were looking for a challenge. Would
> >you care to take me on for points per watt in the 2000 ARRL CW
Sweepstakes?
> >I won't call you a chicken if you prefer a different type of operating
and
> >don't accept. :-)

> I appreciate the offer. The problem is that I am not a good CW op. Even if
I
> was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS
happens
> on weekends where I have to visit and help relatives.

Well, I would agree to letting you operate on SSB and I operate on CW, with the same points-per-watt stipulation. At 350/hr QSOs, you could do pretty well, I imagine. :-) But I do understand about family obligations; mine is wondering if I still live there. :-)

73,
Ed Hare, W1RFI

3381. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Lm7A5.25$ai4.104635@news.ntplx.net>
Source record: 179355

Fractenna <fractenna@aol.com> wrote:

> Copies of patent 6,104,439 are available on request to members of the fractal
> antenna reflector.

It is also available on the US Gov't Patent and Trademark Office Website.

http://164.195.100.11/netahtml/srchnum.htm

Here is the abstract for patent 6,104,439:

United States Patent 6,104,439
Jeong , et al. August 15, 2000

Method and apparatus for motion estimation

Abstract
A method for motion estimation includes steps for constructing a first image segment representing a portion of present image frame and a second image segment having a plurality of image segments of an adjacent frame, comparing said plurality of image segments of said second image segment with the image signal within the first image segment, and generating a number of error values, detecting a first motion vector at one scale of resolution using the generated error values, outputting the error value associated with a reference segment pointed by the first motion vector, and the error values corresponding to the reference segment shifted by one unit of selected resolution respectively in selected direction(s), generating a second motion vector in finer scale of resolution using the output error values, and summing the first and second motion vectors.

Inventors: Jeong; Jechang (Seoul, KR); Ahn; Wooyoun (Suwon, KR); Jeon; Byeungwoo (Sungnam, KR)
Assignee: Samsung Electronics Co., Ltd. (Kyungki-Do, KR)
Appl. No.: 547011
Filed: October 23, 1995

Hope this helps.

73,
Ed Hare, W1RFI

3382. Re: $1000 FRACTAL ANTENNA CHALLENGE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Yy7A5.26$ai4.105427@news.ntplx.net>
Source record: 179356

Tom W8JI <2w8ji@contesting.com> wrote:

> It depends on what you mean by "radiation resistance". Radiation
> resistance has many uses, none of which mean anything about antenna
> efficiency unless all loss resistances are normalized to the same
> point in the system.

I was using the term interchangeably with "feed-point" impedance, a useage that appears to be somewhat common. In reading the responses to my statement, however, I believe that useage to be incomplete and misleading.

73,
Ed Hare, W1RFI

3383. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <3C7A5.27$ai4.105753@news.ntplx.net>
Source record: 179357

Arrow146 <arrow146@aol.com> wrote:

>>Do I not recall, either from a post or his Web page, that the efficiency
>>is 85%?

> >Nope. Read again.

> And you wonder why people get upset with you.

No need to be upset with him; I posted a figure, he told people that it was incorrect and suggested that they re-read his web site. A few will, but most still do not know what the efficiency of his antenna is. I do not see his choosing to withold the actual figure from this discussion to be a personal insult to me or anyone else.

73,
Ed Hare, W1RFI

3384. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d10cbd.41508688@news.akorn.net>
Source record: 179358

On Tue, 26 Sep 2000 16:22:58 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>No need to be upset with him; I posted a figure, he told people that it was
>incorrect and suggested that they re-read his web site. A few will, but
>most still do not know what the efficiency of his antenna is. I do not see
>his choosing to withold the actual figure from this discussion to be a
>personal insult to me or anyone else.
>
>73,
>Ed Hare, W1RFI

That's good advice Ed.

Evasiveness is not an insult. It is simply means someone doesn't want
to talk about something.

73 Tom

3385. WTB KLM 435-18C or equiv.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: bobby <news@bobby.net>
Message-ID: <8qr328$78ts$1@newssvr05-en0.news.prodigy.com>
Source record: 179359

Does anyone have a KLM 435-18C or similar Circular Polarized
UHF satellite antenna hanging around the shack still waiting to be
put up or sold ?
Perhaps you've put it up and aren't using it any more
I'm interested in buying it and playing with it for a while.
tnx 73 Bobby K4BGA

3386. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000926182103.03949.00000864@ng-cq1.aol.com>
Source record: 179360

>
>Could you please compare the relevant attribute of the 6HF5 to what you
>believe
>to be (or have been) better?
>
>73
>Chip N1IR
>
>
>
>
>
>

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

3387. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000926182224.03949.00000866@ng-cq1.aol.com>
Source record: 179361

>
>Which one? What model? What year?
>
>73
>Chip N1IR
>

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

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Be warned

3388. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000926182357.03949.00000868@ng-cq1.aol.com>
Source record: 179362

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

3389. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000926182427.03949.00000869@ng-cq1.aol.com>
Source record: 179363

>
>Can you tell us what an aperture engine is, and who came up with it?
>I'm sure you feel it is important to explian given that it is
>important to put in all your posts.
>
>73
>Chip n1IR
>
>
>

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. HIs "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

3390. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: klopie <co@yok.com>
Message-ID: <39D123B4.788E83B5@yok.com>
Source record: 179364

Lets just tar and feather chipper.

Roy Lewallen wrote:

> I'm very, very sorry to hear this.
>
> For several years, I've watched one person after another appear on the
> newsgroup and try to engage Chip in a meaningful technical discussion.
> And one by one, they fall under his onslaught of insults, arrogance,
> pedantry, rudeness, and childish behavior. No one has succeeded. No one
> will succeed. For a long, long, time, I bit my tongue hard, and tried
> really, really, hard to treat Chip the same way as I try to treat
> everyone else. I bent over backward to not say anything insulting or
> personal. My comments were directed solely to what was said, not who
> said it. I'm far from perfect, so I didn't always succeed, but I think I
> did pretty well. But I finally lost it after asking a series of honest
> and objective questions, and getting the usual rude smart-ass one-liners
> and insults in response. I've given up on Chip -- it's not possible to
> hold an intelligent conversation with him, at least not on this
> newsgroup. I've come to dislike the person himself, not just what he
> says. This isn't just because of his rude responses to me, but also
> because of what he's done to everyone else he encounters here.
>
> The most recent active arrivals here have been Ed and Steve. Ed tried
> really hard to be objective and factual -- and did an excellent job of
> it --, and engage in a meaningful dialog. He kept his cool in the face
> of the onslaught. But I sense he's pretty much given up on Chip like we
> all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
>
> Steve set an example we should all follow, but frankly I don't think I'm
> capable of maintaining as high a standard of conduct as Steve has shown.
> He deserves all our thanks and respect. He's a true professional and a
> true gentleman. So it's particularly hard to see him go.
>
> So what does his going have to do with Chip? Steve hasn't said why he
> left, and I haven't contacted him by email -- yet. I very strongly
> suspect, based on several years of observation, that Chip is somehow
> part of the reason for his leaving. If I'm right, we can and should
> blame Chip for depriving us of someone very knowledgeable, objective,
> and willing to share information. We could have learned a lot from him.
> If I'm wrong, well, then, the rest of what I have to say here is still
> relevant.
>
> How much longer can we put up with this destructive behavior from one
> spoiled bully? How can we make it stop? The obvious solution, and one

> I'm sure would be effective, is to simply never respond to any post Chip
> makes. But this has been suggested several times, and some of us just
> don't seem to be capable of doing it. Also, new folks keep dropping in
> and naively trying to engage Chip in a meaningful dialog. It's hard to
> watch them get discouraged and disgusted one by one, as the rest of us
> have, without lending support.
>
> We can't keep him from posting, and that's how it should be -- this is a
> public newsgroup. So the only way to cure the problem lies in the way we
> respond. Any suggestions?
>
> Roy Lewallen, W7EL
>
> VE9SRB wrote:
> >
> > "Fractenna" <fractenna@aol.com> wrote in message
> > news:20000924221311.14996.00000641@ng-cb1.aol.com...
> > >
> > > Nathan Cohen, Ph.D.
> >
> > For reasons that I cannot discuss on this NG, this will be my last and final
> > post.
> >
> > Private correspondence welcome.
> >
> > 73,
> > Steve, VE9SRB

3391. Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <8qr8h3kq1@news.asu.edu>
Source record: 179365

I just received the latest QEX/Communications Quarterly magazine from the ARRL.

I was surprised to see, in the letters, a critique by Walter Maxwell of a Communications Quarterly article by Steven Best (which was apparently an article critiquing an earlier article in QEX by Walter Maxwell), followed by a letter by Steven Best and a follow up letter by Walter Maxwell. Apparently there have now been 2 articles and 3 letters published, on how to analyze simple transmission lines and networks, that do not agree with each other. I confess that I have not read either article; I figured I understood network theory already.

In areas where things are unknown, measurements in dispute, problems unsolved, or where people have differences of opinion on what is the best way to do something, there can be controversies. Unless I misunderstand, (always a definite possibility) this is a disagreement about simple network analysis (apparently, among other things, they don't agree on various input and output impedances of a T-network with terminations given). Since it is a well understood area, it seems strange that the editor and/or technical advisors are unable to figure out what is correct. Perhaps someone on the newsgroup understands the politics of this and can explain to me what is really going on.

73 Kevin w9cf@ptolemy.la.asu.edu

3392. Re: Newsgroup jammers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Malcolm Austin <Malcolm@g3rem.freeserve.co.uk>
Message-ID: <8qrb1v$k32$1@news6.svr.pol.co.uk>
Source record: 179366

Jim, a nicely put posting.

I am sure most people would agree with you, that there are certain jammers on this newsgroup. It still amazes me that the same 4 or 5 people continue to ruin what is a really good NG.

I don't know about you, but if I meet someone on the street who is obviously unstable, I walk away quickly. I wonder why it is that a few here seem to want to continually "wind him up".

The whole NG would benefit from the saner ones keeping their thoughts to themselves.

I am sure that many, many contributors to the group have gone away purely because of the childish like mentality often seen in NG posts.

Many people may like to try the filters which are available on most e-mail packages. I
for one have filters on certain guys and subject matters. It does make for some interesting
NG threads where you don't see the "silly" replies !!

Regards, Malcolm...

Jim Pennino <jimp@mail.specsol.com> wrote in message
news:i45pq8.5sg.ln@mail.specsol.com...
>
> While this is an open newsgroup and all are free to post, certain
> individual(s) have persisted in postings that have no content other than
> to create flames, i.e. a newsgroup jammer if you will.
>
> Given the delays in newgroup propogation, I propose the following:
>
> When the "jammer" makes a post, respond with something similar to the
> following:
>
>
> This poster has, in my personal opinion, a track record of abuse and troll
> like posts.
>
> Do not resond to this post. This person, in my personal opinion, is not
worth
> the bandwidth.
>
> For those that have doubts, go to www.dejanews.com and do an advanced
> search with the following parameters:

>
> Forum: rec.radio.amateur.antenna
>
> Author: fractenna
>
> Keywords: "this thread is closed" 53 hits last count
> "lawsuit" 47 hits last count
> "death threat" 11 hits last count
>
>
>
> Once one sees such a follow up, no further post is necessary.
>
> Of course, all of this is purely my personal opinion based on observation
> of certain posters, some of which in my personal opinion are emotionally
> unstable.
>
> Jim Pennino
>
>

3393. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d129a9.48912915@news.akorn.net>
Source record: 179367

On 26 Sep 2000 22:38:27 GMT, atkes@imap1.asu.edu wrote:

>In areas where things are unknown, measurements in dispute, problems
>unsolved, or where people have differences of opinion on what is the
>best way to do something, there can be controversies. Unless I
>misunderstand, (always a definite possibility) this is a disagreement
>about simple network analysis (apparently, among other things, they
>don't agree on various input and output impedances of a T-network with
>terminations given). Since it is a well understood area, it seems
>strange that the editor and/or technical advisors are unable to figure
>out what is correct. Perhaps someone on the newsgroup understands the
>politics of this and can explain to me what is really going on.
>
>73 Kevin w9cf@ptolemy.la.asu.edu

Walt Maxwell had several people peer review his reply to QEX.

Walt is really good about soliciting and considering outside input and comments, changing his opinion with convincing evidence, and admitting mistakes.

I think very very highly of Walt Maxwell. Please let me know if you find any flaws in his statements. I'm sure Walt would also value your input.

73 Tom

3394. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000926194432.01527.00000030@ng-df1.aol.com>
Source record: 179368

>The MI2 file is available on request to members of the fractal antenna reflector. To join.....<

I'd sooner stick my dick in a meat grinder!

Rick K1BQT

3395. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D04C33.4E5D7A2D@eznec.com>
Source record: 179429

mono-ton-ic, adj. [first known English use 1797] . . . having the property either of never increasing or never decreasing as the values of the independent variable or the subscripts of the terms increase.

-- Merriam Webster's Collegiate Dictionary.

Hence, an impedance that increases monotonically with frequency is one whose impedance keeps going up and never goes down. This isn't a particularly unusual word -- you'll find it used often in technical and mathematical articles and texts.

I highly recommend getting a dictionary. They're very useful in the process of communicating. If you don't like books, you can get it on a CD-ROM for a modest price.

Roy Lewallen, W7EL

Brian Kelly wrote:
>
> Roy Lewallen wrote:
>
> > with its impedance increasing monotonically with . . .
>
> >
> There's a keeper! What the (bleep!) is "monotonically"???
> >
> w3rv

3396. Re: RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D04F8A.908E048F@eznec.com>
Source record: 179430

You don't get an awful lot of impedance from a single bead. It's best to wind several turns on a single core, since the impedance goes up as the square of the number of turns. 10 turns on one bead equals 100 beads clamped on the wires. This might not be practical, though, if your speaker wires are large diameter and you don't have a big core. To be most effective, the cores should be long and thick.

Be sure to use the same treatment on the power cord, too, and any other long wires entering the stereo that can act like an antenna for it. Always run both conductors through the core(s) together -- don't try to split them and run them separately.

If your feedline also goes close to the stereo or other wiring, a balun or some other method of balancing the feeline conductor currents might help also.

Roy Lewallen, W7EL

Jeffrey Steinberg wrote:
>
> I have some major RFI coming from my atic-mounted dipole (about 25 feet
> away from home theater). After some suggestions I put some Palomar
> RFI beads (actually the split beads) around the speaker wires (monster-brand)
> right after they exit the stereo.
>
> Question: The speaker runs are quite long. Do I need to add more beads at the
> stereo end? If I do, will I still get it, and if so will puting them at the
> speaker ends (in the wall) help? The speakers are B&W large in-wall speakers
> (not sure of model number).
>
> I am considering a tripod mounted beam antenna that will raise the antenna
> another 10 to 15 feet from the dipole. Will that help much or still too close.
>
> Thanks. Running only 100-150 watts.
>
> --jeffrey steinberg, kc2guc

3397. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <iol0tsgom809sk85fkedi1sloq3j2fpr8b@4ax.com>
Source record: 179431

Gee, that would requre reposting every post you've ever made to this newsgroup, Chip....

Why don't you just make the NEC file for the MI2 or the FQY or ANY of your antennas publicly available on this NG, and quit playing these control-freak games.

The reason some on this newsgroup haven't attempted to join is because we've heard what happened when others have tried. Steve Best says his membership is still "Pending", and you know what? Unlike you, I BELIEVE HIM.

Steve has been nothing but straightforward on this NG, and in the emails he and I have exchanged. He is a highly respectable human being, with alot of personal knowledge he is actually WILLING to share.

Your insistance that people join your reflector sounds to me like a way for you to collect email addresses you can sell to companies to spew spam to their mailboxes, and a way to sate your thirst for control.

I won't be joining your reflector... I already get enough spam.

To the others on this NG, I apologise for this rant. But I felt it needed to be said.

-SSB

On or about 26 Sep 2000 01:05:44 GMT, fractenna@aol.com (Fractenna), using the forum rec.radio.amateur.antenna did say:

:>Chip has an established history of making "less than straight
:>forward" statements.
:
:Could you kindly quote some examples for us?
:
:73
:Chip N1IR

3398. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <USYz5.878$37.746@newsfeed.slurp.net>
Source record: 179432

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3399. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <STYz5.879$37.1641@newsfeed.slurp.net>
Source record: 179433

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3400. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D05ACD.D157672D@mindspring.com>
Source record: 179434
Body handling: HTML body converted to readable text

W1RFI wrote:

> >From: sideband@mindspring.com
>
> > I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> > have the use of a MFJ 259 analyzer. I am only able to put
> >this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> >complex and currently have it hidden under the wooden balcony
> >of the apartment above me. The SWR is currently about 1.8 at 50 MHz.
>
> This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above
> ground. The antenna, when resonant, would have a feed-point impedance of 90
> ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.
>
> If your transmitter is delivering full power into 1.8:1, there is nothing that
> needs to be corrected. If I assume that you are using 25 feet of RG-58, the
> losses are as follows:
>
> RG-58 has a loss of 3.6 dB/100 feet. Your 25-foot section has a loss of 0.9
> dB. The *additional* loss caused by operating the 25-foot line at 1.8:1 SWR is
> 0.1 dB, for a total loss of 1.0 dB. To put it in perspective, an S unit is
> usually 6 dB. If you are using 25 feet of RG-8 foam, the total loss at 1.8:1
> SWR is 0.3 dB.
>
> > If I tune the frequency either up or down on the analyzer the
> > SWR goes up. Does this mean that the antenna is tuned
> >as good as is 'possible'...?
>
> Yes, it generally does. Most antennas impedance varies with height above
> ground. In free space, a dipole would have a 72 ohm impedance. Most dipoles
> on HF are fed with 50 ohm line because the impedance *at typical heights above
> ground* is often close to 50 ohms. But it can vary from less than 20 ohms at
> very low heights to about 90 ohms at about a half wavelength.
>
> 73,
> Ed Hare, W1RFI

Thanks Ed. I was able to get the SWR down to 1.4:1 after moving the coax a little.
I had a small section that paralleled the antenna.

3401. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <RUYz5.880$37.209@newsfeed.slurp.net>
Source record: 179435

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3402. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <RVYz5.883$37.1610@newsfeed.slurp.net>
Source record: 179436

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3403. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <SWYz5.884$37.1680@newsfeed.slurp.net>
Source record: 179437

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3404. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <RXYz5.887$37.1391@newsfeed.slurp.net>
Source record: 179438

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3405. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <RYYz5.889$37.1680@newsfeed.slurp.net>
Source record: 179439

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3406. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <QZYz5.891$37.541@newsfeed.slurp.net>
Source record: 179440

So, the 6LW6, a hollow-state-technology air-cooled variable transducer resistor, would be the ideal melding of old technology with, and complement to, the new-technology Air Cooled Directionally Selective Radiator Resistor?

K3BHJ

3407. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ctZz5.935$37.1122@newsfeed.slurp.net>
Source record: 179441

Arright! Everybody outta the pool!

That's twice for stutters on 2 different machines with 'doze95 and 'doze98, and OE4++ and OE5++, respectively.

Is my ISP (copper.net) possibly complicitous here? I just now asked for their help.

Could one of Micro$quish's stealth updates have caused this? I get 'em almost daily.

Is it the approach of the new moon?

K3BHJ

3408. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <cuZz5.941$37.1525@newsfeed.slurp.net>
Source record: 179442

Arright! Everybody outta the pool!

That's twice for stutters on 2 different machines with 'doze95 and 'doze98, and OE4++ and OE5++, respectively.

Is my ISP (copper.net) possibly complicitous here? I just now asked for their help.

Could one of Micro$quish's stealth updates have caused this? I get 'em almost daily.

Is it the approach of the new moon?

K3BHJ

3409. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <zuZz5.942$37.1179@newsfeed.slurp.net>
Source record: 179443

Arright! Everybody outta the pool!

That's twice for stutters on 2 different machines with 'doze95 and 'doze98, and OE4++ and OE5++, respectively.

Is my ISP (copper.net) possibly complicitous here? I just now asked for their help.

Could one of Micro$quish's stealth updates have caused this? I get 'em almost daily.

Is it the approach of the new moon?

K3BHJ

3410. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <yvZz5.944$37.231@newsfeed.slurp.net>
Source record: 179444

Arright! Everybody outta the pool!

That's twice for stutters on 2 different machines with 'doze95 and 'doze98, and OE4++ and OE5++, respectively.

Is my ISP (copper.net) possibly complicitous here? I just now asked for their help.

Could one of Micro$quish's stealth updates have caused this? I get 'em almost daily.

Is it the approach of the new moon?

K3BHJ

3411. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D06514.7C709323@mindspring.com>
Source record: 179445

I'm there too.

W4JLE wrote:

> I will take the pledge as well, as of this date I will never again respond
> to the troll. His thinking is as bent as his antenna!
>
> "Yuri Blanarovich" <k3bu@aol.com> wrote in message
> news:20000925230851.23659.00000915@ng-fd1.aol.com...
> > Very well put Roy, time to end this nonsense.
> > I am guilty of getting provoked, getting infected with his "style" and
> trying
> > to straighten few things, sometimes with parody, but nothing works. I
> think the
> > only way is to ignore NCs and if the casual innocent new antenna groupie
> > stumbles on NC and engages him, we should have a private email going to
> him
> > with warning what awaits and with request to read the F... archives before
> > deciding to engage.
> > (Maybe we should close every thread Fractennas write?)
> >
> > I solemnly pledge not respond to F... trolls from now on! So help me dBF!
> > Any compadres?
> >
> > Yuri, K3BU, VE3BMV, VE1BY, P40A etc.
> >
> > Roy wrote:
> > >
> > >For several years, I've watched one person after another appear on the
> > >newsgroup and try to engage Chip in a meaningful technical discussion.
> > >And one by one, they fall under his onslaught of insults, arrogance,
> > >pedantry, rudeness, and childish behavior. No one has succeeded. No one
> > >will succeed. For a long, long, time, I bit my tongue hard, and tried
> > >really, really, hard to treat Chip the same way as I try to treat
> > >everyone else. I bent over backward to not say anything insulting or
> > >personal. My comments were directed solely to what was said, not who
> > >said it. I'm far from perfect, so I didn't always succeed, but I think I
> > >did pretty well. But I finally lost it after asking a series of honest
> > >and objective questions, and getting the usual rude smart-ass one-liners
> > >and insults in response. I've given up on Chip -- it's not possible to
> > >hold an intelligent conversation with him, at least not on this
> > >newsgroup. I've come to dislike the person himself, not just what he
> > >says. This isn't just because of his rude responses to me, but also
> > >because of what he's done to everyone else he encounters here.
> > >

> > >The most recent active arrivals here have been Ed and Steve. Ed tried
> > >really hard to be objective and factual -- and did an excellent job of
> > >it --, and engage in a meaningful dialog. He kept his cool in the face
> > >of the onslaught. But I sense he's pretty much given up on Chip like we
> > >all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
> > >
> > >Steve set an example we should all follow, but frankly I don't think I'm
> > >capable of maintaining as high a standard of conduct as Steve has shown.
> > >He deserves all our thanks and respect. He's a true professional and a
> > >true gentleman. So it's particularly hard to see him go.
> > >
> > >So what does his going have to do with Chip? Steve hasn't said why he
> > >left, and I haven't contacted him by email -- yet. I very strongly
> > >suspect, based on several years of observation, that Chip is somehow
> > >part of the reason for his leaving. If I'm right, we can and should
> > >blame Chip for depriving us of someone very knowledgeable, objective,
> > >and willing to share information. We could have learned a lot from him.
> > >If I'm wrong, well, then, the rest of what I have to say here is still
> > >relevant.
> > >
> > >How much longer can we put up with this destructive behavior from one
> > >spoiled bully? How can we make it stop? The obvious solution, and one
> > >I'm sure would be effective, is to simply never respond to any post Chip
> > >makes. But this has been suggested several times, and some of us just
> > >don't seem to be capable of doing it. Also, new folks keep dropping in
> > >and naively trying to engage Chip in a meaningful dialog. It's hard to
> > >watch them get discouraged and disgusted one by one, as the rest of us
> > >have, without lending support.
> > >
> > >We can't keep him from posting, and that's how it should be -- this is a
> > >public newsgroup. So the only way to cure the problem lies in the way we
> > >respond. Any suggestions?
> > >
> > >Roy Lewallen, W7EL
> > >
> >
> >

--
The preceding may or may not have been authored by myself but I offer it to you
for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I
refuse to use a
spell checker and don't take criticism well.

3412. Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: me17@privacy.net
Message-ID: <39d0703a.8652027@news.mia.bellsouth.net>
Source record: 179446

Agent is resisting. This will be resolved.

3413. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <I1UxmMA9SE05Ew+g@ifwtech.demon.co.uk>
Source record: 179447

Roy Lewallen wrote:

>I'm a former TV repairman myself. Dunno how where former radio repairmen
>fit on the social status, but Howard Vollum, cofounder of Tektronix, was
>also a former radio repairman. I'm sure it wouldn't take much looking to
>find a long list of well respected, even prominent scientists and
>engineers who once kept food on the table this way.
>
Howard Vollum is in good company. Richard Feynman was another kid who
made pocket money by repairing radios.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3414. Luking

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: ramdum7@inorbit.com
Message-ID: <39d072b3.9285561@news.mia.bellsouth.net>
Source record: 179448

Greetings Gents,
I'm still lurking, keep up the good fight.
73, Ohm-babadada

3415. RADIOWORKS HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Miguel Costa <misc@students.fct.unl.pt>
Message-ID: <8qps3g$p0o$1@srvlis16.teleweb.pt>
Source record: 179449

Can anyone tell me...if the radioworks mail is w4thu@radioworks.com or it has changed....because they do not answer my requests of ordering....:-(

thaks.

CT2GUX

3416. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qpsi8$s29$1@plutonium.btinternet.com>
Source record: 179450

By reading some of the articles displayed on this newsgroup,
anyone (that's most of us) who takes an interest in human
written behaviour can learn more about the dozen or so
persistent tormentors than about the single solitary
tormented.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

3417. WTB: MFJ-914 Tuner Extender

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: BHL <philoxeny@hotmail.com>
Message-ID: <%D_z5.53$_X.6228@news7.onvoy.net>
Source record: 179451
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Looking for one of these to assist my FT-990 auto tuner. Contact: BHL philoxeny@hotmail.com

3418. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D051C5.55F5@wt.net>
Source record: 179452

Roger Halstead wrote:

>
> This one was just skimming the tops of the trees and went right over the
> house. No damage to the roof (seal down shingles), but the neighbors lost
> some shingles.
> Guy to the East lost a whole tree and it took the top out of a big Oak tree
> about 600 yards East.
>
> We get straight line winds that are much worse and do far more damage.
> This one took off a few shingles from a couple of the houses.

I've watched straight line cold front winds crumple a past push up mast I had like it was a soda straw. A guy broke first, and there wasn't time to do anything except watch it go. I estimate the winds at 80 mph +-. I've had hurricane winds "alicia" that converted a 10m GP I had into an arrowhead." All the radials and radiator pointing the same way". Many, many downed trees in that storm and the winds a fairly wimpy 105-115 mph. I used to live in Kansas back in the 60's. " Wichita, and the KC area" I can tell you stories about real tornadoes. They are like a weekly thing up there it seemed like. Most houses up there have basements to huddle in, and we used ours quite a bit. I've seen whole blocks of houses flattened like a gas explosion. I've even been camping when a tornado hit our camp. We had a coleman camp stove on a stand in front of the tent. We huddled in a big army tent when it hit. The walls of the tent started flapping in and out like it was thinking of flying off. The tent stayed, but we watched the camp stove fly away in the wind. We never saw it again. Here in Texas, 85% of the tornadoes are fairly wimpy in comparison to Kansas. But there are exceptions, like the one recently that obliterated the place. The panhandle gets a few bad ones from time to time. Here in Houston, it's hurricane country, with the occasianal wimp tornado. But we're way overdue on a bad hurricane. A bad one, say 150 mph, will obliterate this town. It will be really bad news. The skyscrapers start raining glass down on the streets from being broken from flying gravel off the roofs, the trees start falling left and right. Many people get flattened from trees falling on their houses. This all happened during alicia with it's wimpy winds. A 150 plus storm will be total distruction for this town. Houston wasn't built for hurricanes. All the big buildings are glass. Even with all this, I still think hurricanes are fun to watch though...g The last one had power transformers blowing up in every direction. They made the sky glow green. MK

--
http://web.wt.net/~nm5k

3419. Re: RADIOWORKS HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: Yuldech Simmprostichienne <Rovad@rimpux.net>
Message-ID: <Pg%z5.55$_X.6942@news7.onvoy.net>
Source record: 179453

Change that to: jim@radioworks.com and you'll get through just fine. Jim is W4THU and he is alive and well and continues to be helpful and informative.

Miguel Costa wrote in message <8qps3g$p0o$1@srvlis16.teleweb.pt>...
>Can anyone tell me...if the radioworks mail is w4thu@radioworks.com or it
>has changed....because they do not answer my requests of ordering....:-(
>
>thaks.
>
>CT2GUX
>
>

3420. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d088bd.7711823@news.akorn.net>
Source record: 179454

On Tue, 26 Sep 2000 04:19:29 -0400, "David J. Windisch"
<davidw@copper.net> wrote:

>So, the 6LW6, a hollow-state-technology air-cooled variable transducer
>resistor, would be the ideal melding of old technology with, and complement
>to, the new-technology Air Cooled Directionally Selective Radiator Resistor?
>
>K3BHJ

Yes Dave!

The 6LW6 had an anode that folded as much metal as possible into a
small area, giving the ability to transfer lots of heat.

It amazes me we have the same technology in antennas.

I see you have your new fractal server working, posting posts within
posts. Nice work, but even that won't help you break the posting
record set by the NG troll and he is doing it multi-single!

73 Tom

3421. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d08a09.8043862@news.akorn.net>
Source record: 179455

On Tue, 26 Sep 2000 02:35:33 -0500, Mark Keith <nm5k@wt.net> wrote:

>Roger Halstead wrote:

snip

Sorry folks. False alarm. I checked NWS records and they reported NO
tornados in Chip's area the day in question, not even F1's

Damage reports that day to the weather service from that area was $0

Looks like it was an imaginary F1 tornado that the fractal survived.

73 Tom

3422. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926080234.10535.00000863@ng-fy1.aol.com>
Source record: 179456

>Wrong.
>
>
>
>
>
>

Could you please compare the relevant attribute of the 6HF5 to what you believe to be (or have been) better?

73
Chip N1IR

3423. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926080538.10535.00000864@ng-fy1.aol.com>
Source record: 179457

>The 6LW6 had an anode that folded as much metal as possible into a
>small area, giving the ability to transfer lots of heat.
>
>It amazes me we have the same technology in antennas.
>

Hi Tom,

Please present published data which reveals that a fractal antenna has been used--and indeed is a so-called property-- to generate and diddipate heat.

So far, you have not been able to present any support for the numerous assertions you have made, at this count almost a dozen in the last day.

73
Chip n1IR

3424. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926080838.10535.00000865@ng-fy1.aol.com>
Source record: 179458

>By the way, the National Weather service says no tornados in your area
>on the date of your "alleged" F1 tornado.
>
>Maybe the MI2 is like an F1 stealth tornado?
>
>73 Tom
>

Yeh Tom; a mass hallucination.

Right....

73
Chip N1IR

3425. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926081229.10535.00000866@ng-fy1.aol.com>
Source record: 179459

>
>I'm not at all surprised at Chip's inability to distinguish between
>"dislike" and "hate".
>
>(My statement was: "I've come to dislike the person himself, not just
>what he
>says. This isn't just because of his rude responses to me, but also
>because of what he's done to everyone else he encounters here.")
>
>I can't think of anyone I hate. I do dislike bullies, and adults who act
>in an insulting, rude, arrogant, or childish fashion, and Chip does all
>of these. There are a very few people I know in this category, since I'm
>generally able to simply avoid them. I refuse, though, to turn over this
>newsgroup to someone who fits this description, so it looks like Chip is
>someone I've got to put up with. And conversely.
>
>Roy Lewallen, W7EL
>
>Fractenna wrote:
>>
>> I see no reason to go by his offer. Roy has now publicly gone on record as
>> saying that he hates me. . .
>

Am I incorrect in understanding your MAGNTITUDE of dislike?. You didn't say 'I dislike this' for example. You asserted that you strongly dislike ME. Personally.

Would you wish me to beg your forgiveness for some bogus violation?

IMHO, your public post is an efort to make me look like something I am not. and makes you look, well, let each make their own assessment.

But please: I am not unhappy to severe all contact with you personally, based on your embarrassing and vile response. That would seem for the best

Nathan Cohen, Ph.D.

3426. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926081319.10535.00000868@ng-fy1.aol.com>
Source record: 179460

>Chips relatives would have a fit if they found out he was in the SS.
>
>73 Tom
>

Which one? What model? What year?

73
Chip N1IR

3427. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926081442.10535.00000869@ng-fy1.aol.com>
Source record: 179461

>
>
>
>Fractenna wrote:
>
>> >As one who is in the squirt gun category in contests (QRP at <20 dBm ERP
>in
>> >the CW SS), I can attest to this. If someone appears to be a sharp op, I
>> >will wait out the pileup until I get through; if he or she is efficient,
>> >there will be an opening sooner rather than later. If the op is fumbling
>> >around at all, I move on to the next op, hoping to maybe come back later.
>> >The first one will get me more often than the second one.
>> >
>> >Now, speaking of contests, Chip, you were looking for a challenge. Would
>> >you care to take me on for points per watt in the 2000 ARRL CW
>Sweepstakes?
>> >I won't call you a chicken if you prefer a different type of operating and
>> >don't accept. :-)
>> >
>> >73,
>> >Ed Hare, W1RFI
>>
>> I appreciate the offer. The problem is that I am not a good CW op. Even if
>I
>> was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS
>happens
>> on weekends where I have to visit and help relatives.
>
>>
>How noble.You toss out challenges by the megabyte but you won't buy into one.
>Besides you got yourself an automatic excuse slip from the BU Dean of
>Socialist
>Blather, you have to feed the dawg too so quite obviously you can't possibly
>run
>against Ed in SS.
>>
>
>> 73
>> Chip N1IR
>
>>
>w3rv
>

Brian--
Would you prefer that I lie and say that I am Go'ds Gift to CW and can't deign to compete against him?

73
Chip N1IR

3428. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926081600.10535.00000870@ng-fy1.aol.com>
Source record: 179462

>>I'd just love to see him put one of those FQYs on 20 on Saturday morning in
>the CQ
>>WW . . The only "runs" he'd generate would be in his pants.
>>>
>>w3rv
>
>.................you mean panty hose??
>

Tom,

I am a straight man. I have no fetishes or bizarre behaviors.

Please. Keep such fantasies to yourself.

73
Chip N1IR

3429. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926081839.10535.00000871@ng-fy1.aol.com>
Source record: 179463

>Hi OM,
>Thanks for asking I feel quite well come to think of it, I share your
>concerns but as you know, the rules on disclosure are quite clear,
>absolutely clear.
>
>I am truly overjoyed to see by your answer that you have finally
>received your own PERSONAL and NOT for COMMERCIAL USE copy of the
>VE9SRB EZNEC MI2 Design, I am truly happy for you that you did not have
>to wait for the snail mail as I understand that it tends to get a bit
>slow this time of the year in the New England area.
>I am truly Glad that you have made the correct decisions to not only
>publish your version of the MI2 in that CLOSED and Company OFFICER
>CONTROLED LIST, I am sure that all of the readers of this news group
>await your OPEN PUBLICATIN in this world wide and OPEN newsgroup with
>true enthusiasm as winter approaches.
>
>Hope that this helps.
>
>And may God Bless.
>
> 73's Steve
> oo
> (__)
> AB2ET
> "I bet Two Extra "Terrestrials"
> Aperture Engine is that a
> singularity detector?In article
>
><20000925065239.09047.00000325@ng-ff1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>>Hi Steve--
>>
>>Can you tell us what an aperture engine is, and who came up with it?
>>I'm sure you feel it is important to explian given that it is
>>important to put in all your posts.
>>
>>My rules on MI2 are clear.
>>
>>73
>>
>>Chip N1IR
>>
>>
>> >Hi OM,

>> >I find this a very strange statement, did you actually send a email
>to
>> >VE9SRB requesting a copy for your your own personal and not for
>> >commercial use, I just wonder what the problem can be?
>> >
>> >I received my personal copy of VE9SRB's file and verified the
>> >information for myself and and I am pleased to say that I DID NOT
>HAVE
>> >TO JOIN ANY CLOSED and COMPANY OFFICER CONTROLED LIST to receive this
>> >file.
>> >
>> >I do not see any Need for the use of ANY CLOASED and COMPANY OFFICER
>> >CONTROLED LIST to disseminate information that is being freely
>debated
>> >on this OPEN and UNCENCORED Newsgroup.
>> >It is my personal opinion if you use this newsgroup to publicize
>your
>> >VERSION of the MI2 as you have obviously done then please at least
>> >have the common courtesy to publicly and freely with NO STRINGS
>> >ATTACHED provide YOUR VERSION in a OPEN and UNCENCORED forum just
>like
>> >Steve VE9SRB has done.
>> >If you are having email problems I will be more then glad, if VE9SRB
>> >has no objection to snail mail you a printed copy.
>> >--
>> > 73's Steve
>> > oo
>> > (__)
>> > AB2ET
>> > "I bet Two Extra "Terrestrials"
>> > Aperture Engine is that a
>> > singularity detector?
>> >In article <20000924210220.25326.00000499@ng-da1.aol.com>,
>> > fractenna@aol.com (Fractenna) wrote:
>> >"sideband" <sideband@cac.net> wrote in message
>> >news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
>> >.
>> >>
>> >> But the advice is still sound. In fact, Steve, if you want, you may
>> >> email it to me as well. I'll keep copies of the message on three or
>> >> four of my machines, so if there's ever any question as to the
>origin
>> >> or the time of the file, I'll have the proof here. Post it to the
>NG
>> >> at the same time, so there's no question.
>> >>
>> >> Just my two cents
>> >>
>> >> -SSB
>> >

>> >>SSB:
>> >>
>> >>I would be happy to send you a copy of the file. I want to check it
>> >>out just to verify that there are no problems with it. I'll send it
>> >>along shortly.
>> >>
>> >>73
>> >>Steve, VE9SRB
>> >>
>> >>
>> >>
>> >> Hi Steve--
>> >>
>> >> I am still awaiting the file you publicly offered on this NG.
>> >>
>> >> I will also remind you (again) that MI2 and other fractal antenna
>> >files are
>> >> available to members of the fractal antenna list.
>> >>
>> >> Again, to remind on joining, do:
>> >>
>> >> fractalantenna-subscribe@egroups.com
>> >>
>> >> 73
>> >> Chip N1IR
>> >>
>> >>
>> >
>> >
>> >Sent via Deja.com http://www.deja.com/
>> >Before you buy.
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.
>

Hi Steve--

Can you tell us what an aperture engine is, and who came up with it?
I'm sure you feel it is important to explian given that it is
important to put in all your posts.

73
Chip n1IR

3430. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926082038.10535.00000872@ng-fy1.aol.com>
Source record: 179464

>"Down the RRAA Band" Hisself clearly stated that he's running a JRC JST 245.
>Very
>nice little HF xcvr actually, but it would go up in a ball of flames and
>smoke if
>it ran much more than 100w out. Whatta mindless dipshit!

Mine puts out 150 watts. I haven't had to replaced the PA transistors yet...

NC

3431. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926082622.10535.00000875@ng-fy1.aol.com>
Source record: 179465

```
>
>Roger Halstead (K8RI) www.RogerHalstead.com
>N833R World's Oldest Debonair? s# CD-2
>
>"Tom W8JI" <2w8ji@contesting.com> wrote in message
>news:39ce6e4c.724288@news.akorn.net...
>> On 24 Sep 2000 15:33:39 GMT, fractenna@aol.com (Fractenna) wrote:
>>
>> >July 5, 1999. F1 Tornado.
>> >It was witnessed, here, by 4 people. Damage included snapping a 14 inch
>oak
>> >tree and a 12 inch maple like tooth picks, at the 10-15 foot level.
>>
>> What distance were these trees from your house?
>>
>> >It skimmed the area over a 3 mile swatch over Lexington, Arlmont, and
>Belmont.
>> >I described this back on the NG some time back.
>> >Best Regards,
>> >Chip N1IR
>>
>> That means nothing. F1 tornados are typically very small in width.
>
>F-1s are not much to worry about except for mobile homes and old houses not
>ancored down.
>
>On weather watch, two, or three years ago, several of us ended up in one
>that was basically clear air.
>Inside it was calm, around the edge it was pretty breezy. My yard is 200
>feet across and it was only slightly farther across than that...maybe by 50
>feet, making it 250 feet at most.
>
>My neighbors wife went running for her house and hit the edge head on. For
>a few seconds she was just stopped, leaning into the wind, but going
>nowhere.
>
>It made a lot of noise taking the tops out of the trees (just the small
>stuff) and that was about it.
>
>Even a low F2 is not terrible except for the stuff flying around....Strong
>F-2 and higher is not something to play around in.
>
>This one was just skimming the tops of the trees and went right over the
>house. No damage to the roof (seal down shingles), but the neighbors lost
```

>some shingles.
>Guy to the East lost a whole tree and it took the top out of a big Oak tree
>about 600 yards East.
>
>We get straight line winds that are much worse and do far more damage.
>This one took off a few shingles from a couple of the houses.
>
>Roger (K8RI)>
>> How far from your house was the tornado?
>> Did it pass through your property? What was the damage to your roof
>> shingles and house?
>>
>> 73 Tom

Sounds about right to me; except this one did cause damage sporadically on a 3 mile path. Did about $5K damage to the house and yard.

The 'funniest' thing is it took my garbage barrel and dumped it on top of the roof of a neighbor 200 feet away(and rolled off). Found the lid about 1/4 mile away.

Too bad I didn't have some geraniums up! Would have had a pink tornado!

73
Chip N1IR

3432. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926082729.10535.00000876@ng-fy1.aol.com>
Source record: 179466

>
>On Tue, 26 Sep 2000 02:35:33 -0500, Mark Keith <nm5k@wt.net> wrote:
>
>>Roger Halstead wrote:
>
>snip
>
>Sorry folks. False alarm. I checked NWS records and they reported NO
>tornados in Chip's area the day in question, not even F1's
>
>Damage reports that day to the weather service from that area was $0
>
>Looks like it was an imaginary F1 tornado that the fractal survived.
>
>73 Tom
>

No; it was an F1 tornado.

Sorry Tom.

You are telling a fib.

73
Chip n1IR

3433. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926082834.10535.00000877@ng-fy1.aol.com>
Source record: 179467

>Gee, that would requre reposting every post you've ever made to this
>newsgroup, Chip....
>
>Why don't you just make the NEC file for the MI2 or the FQY or ANY of
>your antennas publicly available on this NG, and quit playing these
>control-freak games.
>
>The reason some on this newsgroup haven't attempted to join is because
>we've heard what happened when others have tried. Steve Best says his
>membership is still "Pending", and you know what? Unlike you, I
>BELIEVE HIM.
>
>Steve has been nothing but straightforward on this NG, and in the
>emails he and I have exchanged. He is a highly respectable human
>being, with alot of personal knowledge he is actually WILLING to
>share.
>
>Your insistance that people join your reflector sounds to me like a
>way for you to collect email addresses you can sell to companies to
>spew spam to their mailboxes, and a way to sate your thirst for
>control.
>
>I won't be joining your reflector... I already get enough spam.
>
>To the others on this NG, I apologise for this rant. But I felt it
>needed to be said.
>
>-SSB
>
>On or about 26 Sep 2000 01:05:44 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>
>:>Chip has an established history of making "less than straight
>:>forward" statements.
>:
>:Could you kindly quote some examples for us?
>:
>:73
>:Chip N1IR
>

GM!

The MI2 file is available on request to members of the fractal antenna
reflector. To join, do

fractalantenna-subscribe@egroups.com

73
Chip n1IR

3434. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000926082934.10535.00000878@ng-fy1.aol.com>
Source record: 179468

>Howard Vollum is in good company. Richard Feynman was another kid who
>made pocket money by repairing radios.
>

I repaired radios as a teenager in the superhet 5 tube days.

73
Chip n1IR

3435. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:03:59 UTC
From: 2w8ji@contesting.com
Message-ID: <39d00ca6.62047470@news.akorn.net>
Source record: 179398

On 26 Sep 2000 01:04:57 GMT, fractenna@aol.com (Fractenna) wrote:

>>What TV sweep tube was the most powerful sweep tube ever used (hint,
>>Admiral TV's only), capable of over 200 watts output on CW with
>>excellent tube life?
>>
>>73 Tom
>
>That's easy.
>
>6HF5.
>
>73
>Chip N1IR

Wrong.

3436. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:10:01 UTC
From: 2w8ji@contesting.com
Message-ID: <39d00d36.62191940@news.akorn.net>
Source record: 179399

On 26 Sep 2000 01:27:13 GMT, fractenna@aol.com (Fractenna) wrote:

>I see no reason to go by his offer. Roy has now publicly gone on record as
>saying that he hates me. That is a personal and deeply troubling statement from
>someone who, at least from a programming niche, otherwise commanded respect
>from me previously.

Nice troll Chip!

Now please, be a man and post the file.

By the way, the National Weather service says no tornados in your area
on the date of your "alleged" F1 tornado.

Maybe the MI2 is like an F1 stealth tornado?

73 Tom

3437. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:13:14 UTC
From: 2w8ji@contesting.com
Message-ID: <39d00ede.62616370@news.akorn.net>
Source record: 179400

On 26 Sep 2000 00:59:41 GMT, fractenna@aol.com (Fractenna) wrote:
>
>I appreciate the offer. The problem is that I am not a good CW op. Even if I
>was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS happens
>on weekends where I have to visit and help relatives.
>
>73
>Chip N1IR

Chips relatives would have a fit if they found out he was in the SS.

73 Tom

3438. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:13:30 UTC
From: rclark@epicedge.com
Message-ID: <39dde6da.288671798@news.seanet.com>
Source record: 179513

On Mon, 25 Sep 2000 16:43:46 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>We can't keep him from posting, and that's how it should be -- this is a
>public newsgroup. So the only way to cure the problem lies in the way we
>respond. Any suggestions?
>
>Roy Lewallen, W7EL
>

Hi Roy,

After some three years, last November or so, I too took the pledge.

There are no two ways about it:
DO NOT RESPOND TO TROLLS.

You cannot reform the unrepentant - especially those that revel in
their role. What bothers me more is that for every 10 (100, 1000)
postings that amount to nothing other than posturing, respondents seem
more satisfied with engaging in the braggadocio rather than posting a
single entry to support the legitimate correspondence trying to unfold
around them.

I am sorry to see Steve depart, his presence allowed the discussion of
fractals to go further than three rounds before the circus began.

73's
Richard Clark, KB7QHC

3439. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:14:49 UTC
From: 2w8ji@contesting.com
Message-ID: <39d00f43.62717186@news.akorn.net>
Source record: 179401

On Mon, 25 Sep 2000 23:45:00 GMT, Brian Kelly <kelly@dvol.com> wrote:

>I'd just love to see him put one of those FQYs on 20 on Saturday morning in the CQ
>WW . . The only "runs" he'd generate would be in his pants.
>>
>w3rv

.................you mean panty hose??

3440. Re: Question for the brain trust.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:15:57 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFDCB1.4797FFBC@dvol.com>
Source record: 179378

CAM wrote:

>
>
> If you want a 20m-10m antenna, simply put up a 33 ft center-
> fed dipole fed with ladder-line with a choke at the coax/
> ladder-line junction. That's what I have and it's rotatable.
> --

It very often ain't that simple or easy. We don't know the guy's installation circumstances. He might very well be one of the innumerable apartment complex dwellers who only have a balcony railing available to clamp a short mast, dipole & feedline. There have been prior discussions in this NG on that topic. Personally, I don't have any time for any of the "small-wire-wound-around-small diameter-fiberglas "solutions". Assuming the guy is a balcony dweller it strikes me that maybe his best bet might be to put together two eight foot Bug Catchers rigged butt-tobutt which are not resonant on any ham band and once again go the open line and tuner route. If space is a real problem then cobble together a pair of four foot Bug Catchers.
>
w3rv

3441. Re: antenna building supplies needed

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:22:20 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39CFEBF5.E8AF4BC8@att.net>
Source record: 179514

http://www.texastowers.com

Haven't received the clock yet but I am still hoping . . .

Thanks again for the card.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

N9YLN wrote:
>
> Does anyone know of a good online source for aluminum tubing and other antenna
> building supplies? Please email me direct at: N9YLN@aol.com with any web links.
> Thanks!
> 73,
> Renee

3442. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:24:49 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFDEC2.9C9C8DF6@dvol.com>
Source record: 179379

Wayne Jones wrote:

> I want to put up a wire 20 m dipole for qrp cw. I have a 2 story house.
> Which would be the better of these 2 options:
> 1) a dipole strung from the edge of the roof (16 ft high) to a 16 ft pole at
> the edge of the property or
> 1) an inverted v strung across the top of the house supported in the center
> at 8 ft above the roof and sloping down at each end to a few inches above
> the roof.
>
> In the case of the inverted V, the coax feed line would be about 60 feet ,
> and with the first option, the feed line would be about 90 feet. (Should I
> be concerned about this?)
> Tnx
>
> Wayne Jones
> ve3 gqx

>
The length of a coax feedline doesn't much matter on HF. The only name of your game is to get as much wire (length) as you can install as high as you can possibly get it. Don't get swallowed up by the worship of R50 + j0 ohm coax feeds, you have other options.
>
w3rv

3443. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:56:47 UTC
From: fractenna@aol.com
Message-ID: <20000925205647.26580.00002039@ng-ch1.aol.com>
Source record: 179515

>et>
>
>Fractenna <fractenna@aol.com> wrote:
>
>> >Let's discuss something much more important. How many girls
>> >did you kiss in high school? :-)
>
>> Are 'dupes' allowed?
>
>Only if they don't appear in the official record. Otherwise, the one being
>duped generally disqualifies the operator. :-)
>
>73,
>Ed Hare, W1RFI

heheh!

73
Chip N1IR

3444. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:57:59 UTC
From: fractenna@aol.com
Message-ID: <20000925205759.26580.00002041@ng-ch1.aol.com>
Source record: 179516

>Rumor has it Chip duped his wife into marrying him. Multiple kisses on
>a girl who was duped obviously shouldn't count.
>
>73 Tom
>

Hi Tom!

Your 'info sources' alkways amaze me!

As usual, I invite you to publish specifics right here. I assure you I will never be embarrassed.

So, give us the source and the content of said rumors.

73
Chip N1IR

3445. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 00:59:41 UTC
From: fractenna@aol.com
Message-ID: <20000925205941.26580.00002043@ng-ch1.aol.com>
Source record: 179517

>As one who is in the squirt gun category in contests (QRP at <20 dBm ERP in
>the CW SS), I can attest to this. If someone appears to be a sharp op, I
>will wait out the pileup until I get through; if he or she is efficient,
>there will be an opening sooner rather than later. If the op is fumbling
>around at all, I move on to the next op, hoping to maybe come back later.
>The first one will get me more often than the second one.
>
>Now, speaking of contests, Chip, you were looking for a challenge. Would
>you care to take me on for points per watt in the 2000 ARRL CW Sweepstakes?
>I won't call you a chicken if you prefer a different type of operating and
>don't accept. :-)
>
>73,
>Ed Hare, W1RFI

I appreciate the offer. The problem is that I am not a good CW op. Even if I was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS happens on weekends where I have to visit and help relatives.

73
Chip N1IR

3446. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:01:48 UTC
From: fractenna@aol.com
Message-ID: <20000925210148.26580.00002045@ng-ch1.aol.com>
Source record: 179369

>Are you really saying that you are not going to write the article because
>the magazine editor would not design the antenna for you? Doug's expertise
>is not in antenna design.
>
>Too bad; I was looking forward to reading the article.
>
>73,
>Ed Hare, W1RFI

No; I said he couldn't suggest a need for a particular design, such as: "we'd like to see a fractal antenna for 40M that would give our readers a good signal on a small lot", and so on

Sorry for the confusion on this.

73
Chip N1IR

3447. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:02:30 UTC
From: fractenna@aol.com
Message-ID: <20000925210230.26580.00002047@ng-ch1.aol.com>
Source record: 179518

>It does not need to go through the ARRL, Chip.
>
>Let us know how the FCC call turns out.
>
>73,
>Ed Hare, W1RFI

I will the next time it persist in real-time.

73
Chip N1IR

3448. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:03:28 UTC
From: fractenna@aol.com
Message-ID: <20000925210328.26580.00002048@ng-ch1.aol.com>
Source record: 179371

>
>On 25 Sep 2000 21:17:55 GMT, fractenna@aol.com (Fractenna) wrote:
>
>
>> I received no such request. I already told you this.
>>
>> And what is stopping you from trying?
>>
>>73
>>Chip N1IR
>
>Just an observation:
>
>Chip has an established history of making "less than straight
>forward" statements.
>
>As far as I have seen, Steve Best is direct and to the point.
>
>Where is the file Chip? Post your file, your word isn't good enough.
>
>73 Tom
>

Hi Tom!

The file is available to those on the fractal antenna list.

73,
Chip N1IR

3449. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:03:39 UTC
From: w1rfi@aol.com
Message-ID: <20000925210339.09007.00000458@ng-ff1.aol.com>
Source record: 179370

>From: sideband@mindspring.com

> I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> have the use of a MFJ 259 analyzer. I am only able to put
>this antenna about 8 feet in the air as I live in a 'no antenna' apt.
>complex and currently have it hidden under the wooden balcony
>of the apartment above me. The SWR is currently about 1.8 at 50 MHz.

This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above ground. The antenna, when resonant, would have a feed-point impedance of 90 ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.

If your transmitter is delivering full power into 1.8:1, there is nothing that needs to be corrected. If I assume that you are using 25 feet of RG-58, the losses are as follows:

RG-58 has a loss of 3.6 dB/100 feet. Your 25-foot section has a loss of 0.9 dB. The *additional* loss caused by operating the 25-foot line at 1.8:1 SWR is 0.1 dB, for a total loss of 1.0 dB. To put it in perspective, an S unit is usually 6 dB. If you are using 25 feet of RG-8 foam, the total loss at 1.8:1 SWR is 0.3 dB.

> If I tune the frequency either up or down on the analyzer the
> SWR goes up. Does this mean that the antenna is tuned
>as good as is 'possible'...?

Yes, it generally does. Most antennas impedance varies with height above ground. In free space, a dipole would have a 72 ohm impedance. Most dipoles on HF are fed with 50 ohm line because the impedance *at typical heights above ground* is often close to 50 ohms. But it can vary from less than 20 ohms at very low heights to about 90 ohms at about a half wavelength.

73,
Ed Hare, W1RFI

3450. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:04:57 UTC
From: fractenna@aol.com
Message-ID: <20000925210457.26580.00002051@ng-ch1.aol.com>
Source record: 179372

>What TV sweep tube was the most powerful sweep tube ever used (hint,
>Admiral TV's only), capable of over 200 watts output on CW with
>excellent tube life?
>
>73 Tom

That's easy.

6HF5.

73
Chip N1IR

3451. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:05:44 UTC
From: fractenna@aol.com
Message-ID: <20000925210544.26580.00002052@ng-ch1.aol.com>
Source record: 179373

>Chip has an established history of making "less than straight
>forward" statements.

Could you kindly quote some examples for us?

73
Chip N1IR

3452. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:06:39 UTC
From: 2w8ji@contesting.com
Message-ID: <39d01a4a.65540209@news.akorn.net>
Source record: 179410

On 26 Sep 2000 03:29:42 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>
> 6KD6? They were used in FTDX400 and 560, pair of them of them ran 500W.

The octal base 6LW6 used in late Admiral Color TV's was a brute. It
had more CCS dissipation than an 811A, but unfortunately was only
used in those sets! It had twice the dissipation of most sweep tubes.

The great performance advantage was due to the fractal shaped anode.
The large surface area allowed it to dissipate huge amounts of power,
just like fractal antennas.

Hope this helps.

73 Tom

3453. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:12:06 UTC
From: fractenna@aol.com
Message-ID: <20000925211206.26610.00001552@ng-ch1.aol.com>
Source record: 179375

>
>I bet the hackers stole his request to join.
>
>Hope this helps.
>
>Tom - N1MM
>
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20000925084243.25741.00000791@ng-mg1.aol.com...
>> >
>> >
>> >"Fractenna" <fractenna@aol.com> wrote in message
>> >news:20000924213645.14996.00000639@ng-cb1.aol.com...
>> >> >After 2 - 3 weeks of "membership pending" status, I gave up on
>> >> >that.
>> >>
>> >> I, as moderator have NEVER RECEIVED a request from Steve Best to join
>the
>> >> fractal antenna reflector.
>> >>
>> >> This is simply a prevarication.
>> >>
>> >> Why Best would lie on this is beyond me.Perthaps he can best explain.
>> >>
>> >> Nathan Cohen, Ph.D.
>> >>
>> >>
>> >
>> >In August 2000 I went to the egroups site and tried to join the fractal
>> >reflector. For at least two weeks, each time I visited the site my
>> >membership status was "pending" waiting for approval of the moderator.
>This
>> >is no lie. Perhaps Chip should check with egroups to make sure that he
>> >receives all requests to join.
>> >
>> >73,
>> >Steve VE9SRB
>>
>>
>> I received no such request. I already told you this.
>>
>> And what is stopping you from trying?
>>

>> NC
>

Hi Tom--

Steve Best can join at anytime. So can you.

What's stopping you?

fractalantenna-subscribe@egroups.com

73
Chip N1IR

3454. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:12:18 UTC
From: k1bqt@aol.com
Message-ID: <20000925211218.04780.00000881@ng-ci1.aol.com>
Source record: 179374

>The file is available to those on the fractal antenna list.<

Ha Ha Ha Ha Ha! Guess that would be Chip, Chip, and Chip.

3455. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:13:55 UTC
From: fractenna@aol.com
Message-ID: <20000925211355.26586.00001747@ng-ch1.aol.com>
Source record: 179376

>>The file is available to those on the fractal antenna list.<
>
>Ha Ha Ha Ha Ha! Guess that would be Chip, Chip, and Chip.
>

Hmmm..

Only one Chip on there Rick. Right now there are 246 others.

73
Chip N1IR

3456. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:17:47 UTC
From: k1bqt@aol.com
Message-ID: <20000925211747.04780.00000882@ng-ci1.aol.com>
Source record: 179377

>Only one Chip on there Rick. Right now there are 246 others.<

Roy's made the offer. Do it or go away.

Rick K1BQT

3457. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:27:13 UTC
From: fractenna@aol.com
Message-ID: <20000925212713.26586.00001755@ng-ch1.aol.com>
Source record: 179380

>>Only one Chip on there Rick. Right now there are 246 others.<
>
>Roy's made the offer. Do it or go away.
>
>Rick K1BQT
>

I see no reason to go by his offer. Roy has now publicly gone on record as saying that he hates me. That is a personal and deeply troubling statement from someone who, at least from a programming niche, otherwise commanded respect from me previously. But disruptive technologies commonly endure such sordid and personal trials. Frankly, I am in no way fazed.

The objective of the fractal antenna reflector is to provide info to those with a bona fide interest in the topic. The fact that some ask for info or demand info without going through this simple process of joining, indicates that they are simply not serious in their requests and their actions.

Again: the MI2 file is made available, on request, to members of the fractal antenna reflector.

Copies of patent 6,104,439 are available on request to members of the fractal antenna reflector.

Also, I have just announced the re-availability of the Hohlfeld-Cohen FRACTALS paper on frequency independence, to members of the fractal antenna reflector. (This is the work described in July 1999 Scientific American).

There will be additional free offers, as always, with time.

ONLY on the fractal antenna reflector.

fractalantenna-subscribe@egroups.com

73
Chip N1IR

3458. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:48:30 UTC
From: mailfrmpa@aol.com
Message-ID: <20000925214830.18308.00000623@ng-cs1.aol.com>
Source record: 179381

Well, yeah. Only I would suggest no spring at the ball mount, and a resonator spring instead. It goes between the mast and the resonator.

Another thing: the Quick Disconnect is darn handy.

And, the fold-over masts fatigue and breag at the hinge. I like the one-piece mast better.

Kï¿½MB

3459. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:50:19 UTC
From: k1bqt@aol.com
Message-ID: <20000925215019.04780.00000894@ng-ci1.aol.com>
Source record: 179382

>I see no reason to go by his offer. Roy has now publicly gone on record as saying that he hates me.<

That's a major accomplishment! Getting Roy Lewallen to hate you must be like working country 390 QRP. I know it took a lot of work and a lot of persistence to win that honor, cause I don't know anyone else who's ever achieved it!.

Face it, Chip. Virtually everybody on here probably hates you. Perhaps you never repaired TVs, but lacking more utilitarian skills, I'm sure you're at least a former bed-wetter.

73

Rick K1BQT

3460. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:50:19 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <vhTz5.3294$GD5.271808@dfiatx1-snr1.gtei.net>
Source record: 179383

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:39CFE332.428622FB@eznec.com...
> I'm very, very sorry to hear this.
>
> For several years, I've watched one person after another appear on the
> newsgroup and try to engage Chip in a meaningful technical discussion.
> And one by one, they fall under his onslaught of insults, arrogance,
> pedantry, rudeness, and childish behavior. No one has succeeded. No one
> will succeed. For a long, long, time, I bit my tongue hard, and tried
> really, really, hard to treat Chip the same way as I try to treat
> everyone else. I bent over backward to not say anything insulting or
> personal. My comments were directed solely to what was said, not who
> said it. I'm far from perfect, so I didn't always succeed, but I think I
> did pretty well. But I finally lost it after asking a series of honest
> and objective questions, and getting the usual rude smart-ass one-liners
> and insults in response. I've given up on Chip -- it's not possible to
> hold an intelligent conversation with him, at least not on this
> newsgroup. I've come to dislike the person himself, not just what he
> says. This isn't just because of his rude responses to me, but also
> because of what he's done to everyone else he encounters here.
>
> The most recent active arrivals here have been Ed and Steve. Ed tried
> really hard to be objective and factual -- and did an excellent job of
> it --, and engage in a meaningful dialog. He kept his cool in the face
> of the onslaught. But I sense he's pretty much given up on Chip like we
> all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
>
> Steve set an example we should all follow, but frankly I don't think I'm
> capable of maintaining as high a standard of conduct as Steve has shown.
> He deserves all our thanks and respect. He's a true professional and a
> true gentleman. So it's particularly hard to see him go.
>
> So what does his going have to do with Chip? Steve hasn't said why he
> left, and I haven't contacted him by email -- yet. I very strongly
> suspect, based on several years of observation, that Chip is somehow
> part of the reason for his leaving. If I'm right, we can and should
> blame Chip for depriving us of someone very knowledgeable, objective,
> and willing to share information. We could have learned a lot from him.
> If I'm wrong, well, then, the rest of what I have to say here is still
> relevant.
>
> How much longer can we put up with this destructive behavior from one
> spoiled bully? How can we make it stop? The obvious solution, and one
> I'm sure would be effective, is to simply never respond to any post Chip

> makes. But this has been suggested several times, and some of us just
> don't seem to be capable of doing it. Also, new folks keep dropping in
> and naively trying to engage Chip in a meaningful dialog. It's hard to
> watch them get discouraged and disgusted one by one, as the rest of us
> have, without lending support.
>
> We can't keep him from posting, and that's how it should be -- this is a
> public newsgroup. So the only way to cure the problem lies in the way we
> respond. Any suggestions?
>
> Roy Lewallen, W7EL

Yep, do what I did a long time ago, add every form of Chip, Frac, etc. that you can think of to your spam filter. Then you will never even see his posts. And if you add it as a subject line filter also, you will never see any of the responses to any of his posts...

73 de W6DKN

3461. Re: HS-1500 for home use

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:57:30 UTC
From: Denis Sharon <denis.sharon@worldnet.att.net>
Message-ID: <eoTz5.4404$s76.332504@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179384

Hello Cal,

I recently bought an HS-1500 o use in my first effort at mobile operating since using a Gonset Communicator II in my father's car in 1960. Before installing it on our motorhome, I put it on a tripod in my very wooded front yard in Connecticut to try it with my new ICOM 706IIG. (This, by the way, is my first solid state gear in 40 years as a ham!)

My principle objectives were to:

1. Become familiar with the antenna in general,
2. Get a "feel" for it's tuning characteristics, and
3. See if it "gets out" at all.

I mounted the antenna on High Sierra's tripod using the wire lathe counterpoise arms supplied. Using the ICOM 706, I made one contact on 75m to North Carolina where I was reported as "very strong". I made the second contact on 17m to Northeastern Belgium and the third contact on 12m to Northeastern Scotland. I quit there. Certainly not conclusive testing by any means but enough to tell me that it clearly is going to work out fine.

The tuning mechanism worked as well as expected although some type of indexing to enable returning to a previous position would be very welcome. Lacking that, even travel limit switches would be vast improvement over the rather funky and ambiguous LED end-of-travel indicator.

Everything considered, even though I have yet to use it mounted on a vehicle, I'm optimistic that it's going to work out great. Hope that helps.

Regards,

Denis W1AOK

Cal Kutemeier <ckuter@ix.netcom.com> wrote in message
news:8qjr0v$3e9$1@slb6.atl.mindspring.net...
> I am thinking about buying a High Sierra 1500 antenna for use at my house.
> I will be mounting this as a temporary antenna using a tripod and 1.25"
mast
> at either 15 or 25 feet.
>
> I would like any comments from anyone who has used this antenna is a
> non-vehicle configuration. What kind of radials / counterpoise, if any,
is
> needed.
>
> Tnx
> Cal

>
>
>

3462. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 01:59:12 UTC
From: fractenna@aol.com
Message-ID: <20000925215912.17821.00000993@ng-fm1.aol.com>
Source record: 179385

>>I see no reason to go by his offer. Roy has now publicly gone on record as
>saying that he hates me.<
>
>That's a major accomplishment! Getting Roy Lewallen to hate you must be like
>working country 390 QRP. I know it took a lot of work and a lot of
>persistence
>to win that honor, cause I don't know anyone else who's ever achieved it!.
>
>Face it, Chip. Virtually everybody on here probably hates you. Perhaps you
>never repaired TVs, but lacking more utilitarian skills, I'm sure you're at
>least a former bed-wetter.
>
>73
>
>Rick K1BQT
>

OK, so they hate me--according to you.

That changes nothing for me.

I have a family and friends and meaningful work to a focused and dedicated life. I enjoy helping others and do so on a daily basis. I enjoy discovering the workings of nature and do so at every opportunity.

I enjoy the excitement and satsifaction of bringing into being a new technology and field of science, and extending the reach of others.

It is a full and meaningful life.

And of course, there is Mozart with Nachtmusik kissing the evening air as I type.

I love being alive and will continue sucking its marrow.

Just wanted to reassure you of my course and resolve.

With Best Wishes,
Chip N1IR

3463. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:00:17 UTC
From: fractenna@aol.com
Message-ID: <20000925220017.17821.00000994@ng-fm1.aol.com>
Source record: 179386

>, I'm sure you're at
>least a former bed-wetter.
>
>73
>
>Rick K1BQT
>
>

Hmmm...no. Why is this related to anything?

73
Chip N1IR

3464. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:03:10 UTC
From: fractenna@aol.com
Message-ID: <20000925220310.17821.00000995@ng-fm1.aol.com>
Source record: 179387

>
>One persistent JERK has caused several people to leave the
>group in disgust. This behavior continues and the JERK does
>not appear to have a conscience or any self decency. This
>really upsets me as I enjoy learning from several of the
>experts provided that I can weed through the nonsense.
>
>Has the group ever considered going to a moderated group with a
>reasonable posting policy? I know that many folks don't like
>the idea of a moderated group but virtually everyone dislikes
>the constant behavior of this one person who can't possibly
>have so much free time and a job. This would fix most of the
>problems and instantly reduce the number of posts by 1/6th
>without loss of any content. Remember that this one bad apple
>is responsible for 1/6th of the posts. I don't know who would
>want the unenviable job of moderator. Am I way off base here
>or do some folks actually enjoy this infantile behavior?
>
>Larry, W0QE
>

I think a moderated RRAA is a great idea Larry.

If I had the time I would volunteer.

73
Chip N1IR

3465. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:05:37 UTC
From: k1bqt@aol.com
Message-ID: <20000925220537.08994.00000504@ng-ff1.aol.com>
Source record: 179388

>...and will continue sucking its marrow.<

How could I possible add to that?

73

Rick K1BQT

3466. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:08:02 UTC
From: fractenna@aol.com
Message-ID: <20000925220802.27113.00000833@ng-fm1.aol.com>
Source record: 179389

>>...and will continue sucking its marrow.<
>
>How could I possible add to that?
>
>73
>
>Rick K1BQT
>

With deference to Thoreau, please don't try.

73
Chip N1IR

3467. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:09:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFF76C.5E9F6187@dvol.com>
Source record: 179394

CAM wrote:

> "David J. Windisch" wrote:
> > DAEAMMMMM! That's ironic! Apologies all around for an unknown cause.
>
> If Netscape says it's waiting for a reply and never gets one,
> the article has most likely been published.

>
Fer damned stright, hit "send" in Messenger ONCE and go to bed!
>
Fuggit all, I'm on my way to Linux. This is ridiculous.
>
b.

3468. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:15:09 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFF8A3.5B3F6DE9@dvol.com>
Source record: 179396

Brian Kelly wrote:

> Fractenna wrote:
>
> >
> > Actually, I find that there are similar 'attention' tricks in contesting to
> > lecturing. Certainly maintaining a drone--whether fast or slow--is a lousy way
> > to hold an 'audience'.
>
> >
> Tell that to w3bgn, damdest monotone contest voice you'll ever run into. He's a
> pilot and takes his nice smooth towertalk into the big dx tests and runs thru
> piles you gotta hear to believe. Not at all related to keeping your stoonts awake
> while you drone on.
> >
>
> > In contesting (or contesting-like condx) most callers listen for a minute or
> > more before they call and they--like me --are attracted by interesting and
> > efficient operating. That makes up for a few dB difference in signals!
>
> >
> Horsepucky. Contesting is not a learning or an admiration society, it's q's ^
> mults and nothing more or less. While you're listening and *learning* and
> *admiring* (CROCK!) I already jumped in and logged the sumbitch and I'm down the
> band whaling on the next catch. What I think you're actually admitting here is
> that it takes you a minute worth of listening time to figger out his callsign
> before you make an ass of yourself once again.
>
> >
> > I have to say there are some CW operators that I am convinced are using the
> > fingers of God--and the ears!
>
> >
> He posteth one more piece of utter brilliance . . .
> >
>
> > There are some good phone ops too--K1AR is quite
> > good. K1DG is also quite good. But the best was (is) W7RM. Listening to him
> > work JA's was a piece of heaven. You needed a drool bucket when you monitored!
>
> >
> He definitely wins the cut glass flyswatter for sucking every point possible outta
> one lousy multiplier year after year.
> >

> >Chip N1IR
> >
> w3rv

. . . aw, shit . . . sorry!

3469. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:24:19 UTC
From: k1bqt@aol.com
Message-ID: <20000925222419.25753.00001018@ng-mg1.aol.com>
Source record: 179390

Actually Chip, to close this out, I don't really blame you for not wanting to post your MI2 file--don't suppose I'd want to either.

73

Rick K1BQT

3470. FS: MFJ -247 HF SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:24:32 UTC
From: Steve <sgironx@home.com>
Message-ID: <ANTz5.27327$qM3.196937@news1.bnapk1.occa.home.com>
Source record: 179391
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

MFJ 247 HF SWR Analyzer

Looks like the newer MFJ 259. Digital display.
Works 100%, looks like new.
Comes in original box, and with original manual.

$75 plus shipping.
You can see an image of it here:

http//members.home.net/sgiron/mfj247.jpg

AD6GO

3471. Re: MFJ -247 HF SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:28:15 UTC
From: Steve <sgironx@home.com>
Message-ID: <3RTz5.27328$qM3.196880@news1.bnapk1.occa.home.com>
Source record: 179392
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

REMOVE "X" in the email address to reply

"Steve" <sgironx@home.com> wrote in message news:...
> MFJ 247 HF SWR Analyzer
>
>
> Looks like the newer MFJ 259. Digital display.
> Works 100%, looks like new.
> Comes in original box, and with original manual.
>
> $75 plus shipping.
> You can see an image of it here:
>
> http//members.home.net/sgiron/mfj247.jpg
>
> AD6GO
>
>

3472. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:30:32 UTC
From: accrider3@aol.comnospam
Message-ID: <20000925223032.23207.00000969@ng-fr1.aol.com>
Source record: 179393

That's like letting the fox guard the hen house. Its just as well the fox has no time, probably still some grant money to burn for a while longer.

3473. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:34:38 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39CFFD32.4089C650@dvol.com>
Source record: 179404

Fractenna wrote:

> >As one who is in the squirt gun category in contests (QRP at <20 dBm ERP in
> >the CW SS), I can attest to this. If someone appears to be a sharp op, I
> >will wait out the pileup until I get through; if he or she is efficient,
> >there will be an opening sooner rather than later. If the op is fumbling
> >around at all, I move on to the next op, hoping to maybe come back later.
> >The first one will get me more often than the second one.
> >
> >Now, speaking of contests, Chip, you were looking for a challenge. Would
> >you care to take me on for points per watt in the 2000 ARRL CW Sweepstakes?
> >I won't call you a chicken if you prefer a different type of operating and
> >don't accept. :-)
> >
> >73,
> >Ed Hare, W1RFI
>
> I appreciate the offer. The problem is that I am not a good CW op. Even if I
> was, I only have (HF) antennas up for 20 and 10 at the moment. Also, SS happens
> on weekends where I have to visit and help relatives.

>
How noble.You toss out challenges by the megabyte but you won't buy into one.
Besides you got yourself an automatic excuse slip from the BU Dean of Socialist
Blather, you have to feed the dawg too so quite obviously you can't possibly run
against Ed in SS.
>

> 73
> Chip N1IR

>
w3rv

3474. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:35:16 UTC
From: "Terrence R. Redding, Ph.D." <terry@oltraining.com>
Message-ID: <B5F58388.10F9%terry@oltraining.com>
Source record: 179395

Bill, the counter can count either discrete IP addresses visiting a page, page visits, or more commonly "hits." A hit is typically any request for content. A text only page would only have the content associated with the text on the page accounting for one hit. However, if the page also included images, the number of hits can be quite high. Images can be visible or invisible (space holders).

For example many web page designers will use small images as space holders to control the positioning of visible elements on a page. I have seen as many as 200 small space holder images on a single complex page. Each image can account for a hit, meaning that a single visit to such a page could generate as many as 200 hits.

Unless you know what a counter is counting, and how the pages being counted are constructed, the counter's information can be considered as no better than an ordinal scale because while the counter allows the webpages or websites to be rank ordered, they in fact don't take into account equality of differences between pages or websites.

Terry - W6LMJ

> From: Bill Aycock <baycock@hiwaay.net>
> Organization: WebUseNet Corp http://www.usenetserver.com - Home of the
> fastest NNTP servers on the Net.
> Newsgroups: rec.radio.amateur.antenna
> Date: Mon, 25 Sep 2000 07:48:02 -0500
> Subject: Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!
>
> Chip- It is NOT 4000-7000 visitors- and you know it- it's that many
> "hits", and the faulty (?) counter on that site registers a hit
> everytime you select a different internal link.
>
> I have, unintentionally, put over 20 counts on it, in one visit- another
> poster, here on the NG, said he added 40 on one visit. I wonder what an
> honest counter would show?

3475. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:42:07 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <32Uz5.87871$i5.3151953@news1.rdc2.on.home.com>
Source record: 179397

Hi, it's Wayne who started this post.

Does the roof constitute a ground? For instance, if the roof is 16 feet high and the antenna is 8 feet over the roof, is the antenna now 24 feet above ground or is it now 8 feet?
Is the antenna is better on the roof because of it's sheer altitude or height above ground? What if I just laid it on the roof?

Wayne

3476. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:54:04 UTC
From: k1bqt@aol.com
Message-ID: <20000925225404.08946.00000439@ng-ff1.aol.com>
Source record: 179402

Check Gilberts reference site for the MI2 substitute--now that's what I call a solid entry!

Rick K1BQT

3477. Taking the Pledge

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 02:54:25 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39d009b5.172708864@news.azstarnet.com>
Source record: 179403

With respect to one individual who I (first I believe) refer to as "Chirp"-- the moniker seems apt considering the way he shifts around when his button is pressed -- I offer the following:

From time to time I have tried to engage this individual in serious technical discussions in the areas of network analysis and antenna range measurements. While I do not claim to be an expert in these areas, I do have some profession skills and experience in both of them. Alas, I have often failed to maintain a level of professionalism and have fallen into pointless bickering, which in hindsight, I regret.

On other occasions, I entered into banter that I felt was more-or-less in jest but once again in hindsight I realize was non-productive and a waste of bandwidth.

In private communications with others, I have expressed the opinion that "Chirp" was simply jerking people around in jest and surely could not be serious. My correspondents felt that I was mistaken. Upon reflection, I tend to agree with their assessments.

Unfortunately, my newsreader does not support kill files, so if I continue to peruse this group, I pledge the following:

I will not engage in any further discussion of topics with subjects that contain the words, "Fractal", "Lawsuit", "Challenge", "Record", and "Web Site Hits" -- for completeness and the hell of it -- I'll include "Carolina Windom" and "GAP Titan" too.

Neither will I respond to any posts or threads that are authored by or contain quotes by "Fractenna", "Chip", "N1IR", "NC", "Phil", "Nathan Cohen, PhD", "Cohen dog", et al.

The best way to deal with malicious jamming and interference on the ham bands is to fail to acknowledge the perpetrator's presence. Should work here too.

Wes Stewart, N7WS

This thread is closed.

3478. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:08:51 UTC
From: k3bu@aol.com
Message-ID: <20000925230851.23659.00000915@ng-fd1.aol.com>
Source record: 179405

Very well put Roy, time to end this nonsense.
I am guilty of getting provoked, getting infected with his "style" and trying to straighten few things, sometimes with parody, but nothing works. I think the only way is to ignore NCs and if the casual innocent new antenna groupie stumbles on NC and engages him, we should have a private email going to him with warning what awaits and with request to read the F... archives before deciding to engage.
(Maybe we should close every thread Fractennas write?)

I solemnly pledge not respond to F... trolls from now on! So help me dBF!
Any compadres?

Yuri, K3BU, VE3BMV, VE1BY, P40A etc.

Roy wrote:
>
>For several years, I've watched one person after another appear on the
>newsgroup and try to engage Chip in a meaningful technical discussion.
>And one by one, they fall under his onslaught of insults, arrogance,
>pedantry, rudeness, and childish behavior. No one has succeeded. No one
>will succeed. For a long, long, time, I bit my tongue hard, and tried
>really, really, hard to treat Chip the same way as I try to treat
>everyone else. I bent over backward to not say anything insulting or
>personal. My comments were directed solely to what was said, not who
>said it. I'm far from perfect, so I didn't always succeed, but I think I
>did pretty well. But I finally lost it after asking a series of honest
>and objective questions, and getting the usual rude smart-ass one-liners
>and insults in response. I've given up on Chip -- it's not possible to
>hold an intelligent conversation with him, at least not on this
>newsgroup. I've come to dislike the person himself, not just what he
>says. This isn't just because of his rude responses to me, but also
>because of what he's done to everyone else he encounters here.
>
>The most recent active arrivals here have been Ed and Steve. Ed tried
>really hard to be objective and factual -- and did an excellent job of
>it --, and engage in a meaningful dialog. He kept his cool in the face
>of the onslaught. But I sense he's pretty much given up on Chip like we
>all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
>
>Steve set an example we should all follow, but frankly I don't think I'm
>capable of maintaining as high a standard of conduct as Steve has shown.
>He deserves all our thanks and respect. He's a true professional and a
>true gentleman. So it's particularly hard to see him go.
>
>So what does his going have to do with Chip? Steve hasn't said why he

>left, and I haven't contacted him by email -- yet. I very strongly
>suspect, based on several years of observation, that Chip is somehow
>part of the reason for his leaving. If I'm right, we can and should
>blame Chip for depriving us of someone very knowledgeable, objective,
>and willing to share information. We could have learned a lot from him.
>If I'm wrong, well, then, the rest of what I have to say here is still
>relevant.
>
>How much longer can we put up with this destructive behavior from one
>spoiled bully? How can we make it stop? The obvious solution, and one
>I'm sure would be effective, is to simply never respond to any post Chip
>makes. But this has been suggested several times, and some of us just
>don't seem to be capable of doing it. Also, new folks keep dropping in
>and naively trying to engage Chip in a meaningful dialog. It's hard to
>watch them get discouraged and disgusted one by one, as the rest of us
>have, without lending support.
>
>We can't keep him from posting, and that's how it should be -- this is a
>public newsgroup. So the only way to cure the problem lies in the way we
>respond. Any suggestions?
>
>Roy Lewallen, W7EL
>

3479. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:29:42 UTC
From: k3bu@aol.com
Message-ID: <20000925232942.23659.00000916@ng-fd1.aol.com>
Source record: 179406

>
>What TV sweep tube was the most powerful sweep tube ever used (hint,
>Admiral TV's only), capable of over 200 watts output on CW with
>excellent tube life?
>
>73 Tom

6KD6? They were used in FTDX400 and 560, pair of them of them ran 500W.

I too have to confess of doing TV and radio repairs, to make it worse - behind the Iron Curtain. Knowing where to kick the radio was the most difficult skill. I also have to confess that I am mechanical engineer and not electronics, and before that I was machinist working on lathe, milling machines, welding and other dirty work like in brick factory and on the kolchoz picking potatoes. How's that for being unqualified with all that dark past. On hell of a life school, 80% what they teach at university, I never used. It might have exercised my brain, but I wish I used some more useful stuff to do that. 80% of knowledge that used in my life/profession was self learned.
Comparing what repairmen write vs. some ass. professor, makes you wonder, eh? Maybe Chippy should have taken TV repair classes instead of who knows what?

Yuri, oK3BU

3480. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:34:01 UTC
From: k3bu@aol.com
Message-ID: <20000925233401.23659.00000917@ng-fd1.aol.com>
Source record: 179407

>>
>I'd just love to see him put one of those FQYs on 20 on Saturday morning in
>the CQ
>WW . . The only "runs" he'd generate would be in his pants.
>>
>w3rv
>
>
>

He'd be on the phone to FCC: Whaaaa, they are QRMing me, please arest them!!!

Yuri

3481. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:35:03 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <HPUz5.248825$i5.3391208@news1.frmt1.sfba.home.com>
Source record: 179408

How did you cause that?

Mike Camp KI7FQ
El Cerrito, CA.
"william ewald" <wgewald@att.net> wrote in message
news:t350tsoj11co99948sum5vib1985iuf0uj@4ax.com...
> x-no-archive:yes
> On Mon, 25 Sep 2000 20:07:42 -0500, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >I dont know what we can do to or about him. He is clearly uncivilized
> >and boorish, as well as vicious.
> >
>
> There was a certain self-important "authority" on the scanner
> newsgroups who behaved in the same way for years. Unfortunately, he
> only stopped when he became terminally ill.
>
>

3482. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:41:42 UTC
From: k3bu@aol.com
Message-ID: <20000925234142.23659.00000918@ng-fd1.aol.com>
Source record: 179409

>
>Well, yeah. Only I would suggest no spring at the ball mount, and a resonator
>spring instead. It goes between the mast and the resonator.
>
>Another thing: the Quick Disconnect is darn handy.
>
>And, the fold-over masts fatigue and breag at the hinge. I like the one-piece
>mast better.
>
>Kï¿½MB
>
>

Spring at the base is handy if you use guy string to the front of the window.
By pulling on the string, you can bend the antenna forward when needed to clear
the obstacles. I always use the guy string. Keep the top of my antenna at
around 13 ft from the ground.
Quick disconnect is handy if you need to hide the antenna frequently, or when
entering low parking garages.
To get better efficiency I used 80m resonator form and wound new coil for 40m
using #14 copper wire on abt 2" diamter PVC and clamped to metal ends with hose
clamps (I run amp also abt 500W)
Works very well. I had no problem with fold over masts.

GL Yuri, K3BU

3483. Re: Balun instead of Coax Choke

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:48:54 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D00E9A.A3C7D673@dvol.com>
Source record: 179415

Roy Lewallen wrote:

> with its impedance increasing monotonically with . . .

>
There's a keeper! What the (bleep!) is "monotonically"???
>
w3rv

3484. Re: [Fractal] [Troll] [OT] New antenna or new logo ?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 03:51:27 UTC
From: k3bu@aol.com
Message-ID: <20000925235127.23659.00000919@ng-fd1.aol.com>
Source record: 179411

>
>I found this on the web:
>
>http://ping.waika9.com/fractal.html
>
>Is it a better than MI2 antenna, fractal antenna scientwists at work
>or the new freaktenna logo ?
>
>--
>Gilbert.
>
>

Awesome!
I hope the first freak didn't eat chili!

Yuri

3485. Re: Antenna opinions requested

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:02:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D011C9.2D04914F@dvol.com>
Source record: 179419

"Eric Sims (Ric)" wrote:

> Your a hoot dude! Are you ever on 3.950? Now that my broadbanded 80/75
> meter dipole is kick'in it, I'll listen fer 'ya (ya, the 4 call means I
> might be a stump jumper).
>
> Ric
>

Wanna try me with yer broadband thingey on 3.505 at 30 wpm?
>
w3rv

3486. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:11:39 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8qp7lfcna1@nnrp1.deja.com>
Source record: 179413

Hi OM,
Thanks for asking I feel quite well come to think of it, I share your concerns but as you know, the rules on disclosure are quite clear, absolutely clear.

I am truly overjoyed to see by your answer that you have finally received your own PERSONAL and NOT for COMMERCIAL USE copy of the VE9SRB EZNEC MI2 Design, I am truly happy for you that you did not have to wait for the snail mail as I understand that it tends to get a bit slow this time of the year in the New England area.
I am truly Glad that you have made the correct decisions to not only publish your version of the MI2 in that CLOSED and Company OFFICER CONTROLED LIST, I am sure that all of the readers of this news group await your OPEN PUBLICATIN in this world wide and OPEN newsgroup with true enthusiasm as winter approaches.

Hope that this helps.

And may God Bless.

73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?In article

<20000925065239.09047.00000325@ng-ff1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
>Hi Steve--
>
>Can you tell us what an aperture engine is, and who came up with it?
>I'm sure you feel it is important to explian given that it is
>important to put in all your posts.
>
>My rules on MI2 are clear.
>
>73
>
>Chip N1IR
>
>
> >Hi OM,
> >I find this a very strange statement, did you actually send a email
to

> >VE9SRB requesting a copy for your your own personal and not for
> >commercial use, I just wonder what the problem can be?
> >
> >I received my personal copy of VE9SRB's file and verified the
> >information for myself and and I am pleased to say that I DID NOT
HAVE
> >TO JOIN ANY CLOSED and COMPANY OFFICER CONTROLED LIST to receive this
> >file.
> >
> >I do not see any Need for the use of ANY CLOASED and COMPANY OFFICER
> >CONTROLED LIST to disseminate information that is being freely
debated
> >on this OPEN and UNCENCORED Newsgroup.
> >It is my personal opinion if you use this newsgroup to publicize
your
> >VERSION of the MI2 as you have obviously done then please at least
> >have the common courtesy to publicly and freely with NO STRINGS
> >ATTACHED provide YOUR VERSION in a OPEN and UNCENCORED forum just
like
> >Steve VE9SRB has done.
> >If you are having email problems I will be more then glad, if VE9SRB
> >has no objection to snail mail you a printed copy.
> >--
> > 73's Steve
> > oo
> > (__)
> > AB2ET
> > "I bet Two Extra "Terrestrials"
> > Aperture Engine is that a
> > singularity detector?
> >In article <20000924210220.25326.00000499@ng-da1.aol.com>,
> > fractenna@aol.com (Fractenna) wrote:
> >"sideband" <sideband@cac.net> wrote in message
> >news:b6cpsscq5mojl5eislj54lljj0b9urq4ep@4ax.com...
> >.
> >>
> >> But the advice is still sound. In fact, Steve, if you want, you may
> >> email it to me as well. I'll keep copies of the message on three or
> >> four of my machines, so if there's ever any question as to the
origin
> >> or the time of the file, I'll have the proof here. Post it to the
NG
> >> at the same time, so there's no question.
> >>
> >> Just my two cents
> >>
> >> -SSB
> >
> >>SSB:
> >>

> >>I would be happy to send you a copy of the file. I want to check it
> >>out just to verify that there are no problems with it. I'll send it
> >>along shortly.
> >>
> >>73
> >>Steve, VE9SRB
> >>
> >>
> >>
> >> Hi Steve--
> >>
> >> I am still awaiting the file you publicly offered on this NG.
> >>
> >> I will also remind you (again) that MI2 and other fractal antenna
> >files are
> >> available to members of the fractal antenna list.
> >>
> >> Again, to remind on joining, do:
> >>
> >> fractalantenna-subscribe@egroups.com
> >>
> >> 73
> >> Chip N1IR
> >>
> >>
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.

Sent via Deja.com http://www.deja.com/
Before you buy.

3487. Re: N1IR Open House

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:13:09 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D01446.AE832CE0@dvol.com>
Source record: 179416

K1BQT wrote:

> Otherwise you have hit us all with a barrage of histrionics, meant to anger and
> incite.
>
> Not my intent. Sorry you don't want to borrow the meter.

>
"Down the RRAA Band" Hisself clearly stated that he's running a JRC JST 245. Very nice little HF xcvr actually, but it would go up in a ball of flames and smoke if it ran much more than 100w out. Whatta mindless dipshit!

>
>
> 73
>
> Rick K1BQT

>
w3rv

3488. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:19:23 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <ftVz5.248944$i5.3394044@news1.frmt1.sfba.home.com>
Source record: 179412

Yuri-
Does Hustler offer taller masts? (Your ant. runs at 13 feet.) How did you
"get it up" that high?

Mike Camp ki7fq

"Yuri Blanarovich" <k3bu@aol.com> wrote in message
news:20000925234142.23659.00000918@ng-fd1.aol.com...
> >
> >Well, yeah. Only I would suggest no spring at the ball mount, and a
resonator
> >spring instead. It goes between the mast and the resonator.
> >
> >Another thing: the Quick Disconnect is darn handy.
> >
> >And, the fold-over masts fatigue and breag at the hinge. I like the
one-piece
> >mast better.
> >
> >K�MB
> >
> >
>
> Spring at the base is handy if you use guy string to the front of the
window.
> By pulling on the string, you can bend the antenna forward when needed to
clear
> the obstacles. I always use the guy string. Keep the top of my antenna at
> around 13 ft from the ground.
> Quick disconnect is handy if you need to hide the antenna frequently, or
when
> entering low parking garages.
> To get better efficiency I used 80m resonator form and wound new coil for
40m
> using #14 copper wire on abt 2" diamter PVC and clamped to metal ends with
hose
> clamps (I run amp also abt 500W)
> Works very well. I had no problem with fold over masts.
>
> GL Yuri, K3BU

3489. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:27:49 UTC
From: k3bu@aol.com
Message-ID: <20000926002749.23659.00000920@ng-fd1.aol.com>
Source record: 179414

>
>Yuri-
>Does Hustler offer taller masts? (Your ant. runs at 13 feet.) How did you
>"get it up" that high?
>
>Mike Camp ki7fq

I use their standard masts, mounted on the fender (72 Buick LeSabre), but I replaced the Hustler whip tips with CB tips sold at radio shack. I adjust the turns on coils to resonate the antenna. At the base I use about 5 turns of 1/4" copper tubing to ground to match to 50 ohm coax.

Yuri

3490. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:40:09 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8qp9bv$b93$1@iac5.navix.net>
Source record: 179417

I will take the pledge as well, as of this date I will never again respond
to the troll. His thinking is as bent as his antenna!

"Yuri Blanarovich" <k3bu@aol.com> wrote in message
news:20000925230851.23659.00000915@ng-fd1.aol.com...
> Very well put Roy, time to end this nonsense.
> I am guilty of getting provoked, getting infected with his "style" and
trying
> to straighten few things, sometimes with parody, but nothing works. I
think the
> only way is to ignore NCs and if the casual innocent new antenna groupie
> stumbles on NC and engages him, we should have a private email going to
him
> with warning what awaits and with request to read the F... archives before
> deciding to engage.
> (Maybe we should close every thread Fractennas write?)
>
> I solemnly pledge not respond to F... trolls from now on! So help me dBF!
> Any compadres?
>
> Yuri, K3BU, VE3BMV, VE1BY, P40A etc.
>
> Roy wrote:
> >
> >For several years, I've watched one person after another appear on the
> >newsgroup and try to engage Chip in a meaningful technical discussion.
> >And one by one, they fall under his onslaught of insults, arrogance,
> >pedantry, rudeness, and childish behavior. No one has succeeded. No one
> >will succeed. For a long, long, time, I bit my tongue hard, and tried
> >really, really, hard to treat Chip the same way as I try to treat
> >everyone else. I bent over backward to not say anything insulting or
> >personal. My comments were directed solely to what was said, not who
> >said it. I'm far from perfect, so I didn't always succeed, but I think I
> >did pretty well. But I finally lost it after asking a series of honest
> >and objective questions, and getting the usual rude smart-ass one-liners
> >and insults in response. I've given up on Chip -- it's not possible to
> >hold an intelligent conversation with him, at least not on this
> >newsgroup. I've come to dislike the person himself, not just what he
> >says. This isn't just because of his rude responses to me, but also
> >because of what he's done to everyone else he encounters here.
> >
> >The most recent active arrivals here have been Ed and Steve. Ed tried
> >really hard to be objective and factual -- and did an excellent job of
> >it --, and engage in a meaningful dialog. He kept his cool in the face

> >of the onslaught. But I sense he's pretty much given up on Chip like we
> >all do sooner or later. (Go ahead and correct me if I'm wrong, Ed.)
> >
> >Steve set an example we should all follow, but frankly I don't think I'm
> >capable of maintaining as high a standard of conduct as Steve has shown.
> >He deserves all our thanks and respect. He's a true professional and a
> >true gentleman. So it's particularly hard to see him go.
> >
> >So what does his going have to do with Chip? Steve hasn't said why he
> >left, and I haven't contacted him by email -- yet. I very strongly
> >suspect, based on several years of observation, that Chip is somehow
> >part of the reason for his leaving. If I'm right, we can and should
> >blame Chip for depriving us of someone very knowledgeable, objective,
> >and willing to share information. We could have learned a lot from him.
> >If I'm wrong, well, then, the rest of what I have to say here is still
> >relevant.
> >
> >How much longer can we put up with this destructive behavior from one
> >spoiled bully? How can we make it stop? The obvious solution, and one
> >I'm sure would be effective, is to simply never respond to any post Chip
> >makes. But this has been suggested several times, and some of us just
> >don't seem to be capable of doing it. Also, new folks keep dropping in
> >and naively trying to engage Chip in a meaningful dialog. It's hard to
> >watch them get discouraged and disgusted one by one, as the rest of us
> >have, without lending support.
> >
> >We can't keep him from posting, and that's how it should be -- this is a
> >public newsgroup. So the only way to cure the problem lies in the way we
> >respond. Any suggestions?
> >
> >Roy Lewallen, W7EL
> >
>
>

3491. Re: RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 04:48:02 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <6UVz5.249037$i5.3394796@news1.frmt1.sfba.home.com>
Source record: 179418

Hello Jeffery-

Higher antenna is always better, for RFI and signal strength.

Mike Camp ki7fq
El Cerrito, CA.

"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:39d02844$0$1346$45beb828@newscene.com...
> I have some major RFI coming from my atic-mounted dipole (about 25 feet
> away from home theater). After some suggestions I put some Palomar
> RFI beads (actually the split beads) around the speaker wires
(monster-brand)
> right after they exit the stereo.
>
> Question: The speaker runs are quite long. Do I need to add more beads
at the
> stereo end? If I do, will I still get it, and if so will puting them at
the
> speaker ends (in the wall) help? The speakers are B&W large in-wall
speakers
> (not sure of model number).
>
> I am considering a tripod mounted beam antenna that will raise the antenna
> another 10 to 15 feet from the dipole. Will that help much or still too
close.
>
> Thanks. Running only 100-150 watts.
>
> --jeffrey steinberg, kc2guc
>

3492. Re: Need source for aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 05:30:13 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <FvWz5.1227$np1.159963@newshog.newsread.com>
Source record: 179420

I received a quote for a bunch of 2" (man is that expensive) as well as 1 3/4 seamless heavy wall from an outfit in Flint Michigan.

I'm not sure what I did with it as I went with steel (for masts), but it may still be around here. If you still need a source, I'll try to find it.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bill" <bill@hovac.com> wrote in message
news:8qmf8q$1d9h$1@box6.cho.cstone.net...
> Does any have some good sources for different size aluminum tubing?
>
>
> Thanks,
>
> Bill
>
>
>
>
>

3493. Re: ATTN: ALL NG READERS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 05:44:57 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <tJWz5.1228$np1.159969@newshog.newsread.com>
Source record: 179421

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39ce6e4c.724288@news.akorn.net...
> On 24 Sep 2000 15:33:39 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >July 5, 1999. F1 Tornado.
> >It was witnessed, here, by 4 people. Damage included snapping a 14 inch
oak
> >tree and a 12 inch maple like tooth picks, at the 10-15 foot level.
>
> What distance were these trees from your house?
>
> >It skimmed the area over a 3 mile swatch over Lexington, Arlmont, and
Belmont.
> >I described this back on the NG some time back.
> >Best Regards,
> >Chip N1IR
>
> That means nothing. F1 tornados are typically very small in width.

F-1s are not much to worry about except for mobile homes and old houses not
ancored down.

On weather watch, two, or three years ago, several of us ended up in one
that was basically clear air.
Inside it was calm, around the edge it was pretty breezy. My yard is 200
feet across and it was only slightly farther across than that...maybe by 50
feet, making it 250 feet at most.

My neighbors wife went running for her house and hit the edge head on. For
a few seconds she was just stopped, leaning into the wind, but going
nowhere.

It made a lot of noise taking the tops out of the trees (just the small
stuff) and that was about it.

Even a low F2 is not terrible except for the stuff flying around....Strong
F-2 and higher is not something to play around in.

This one was just skimming the tops of the trees and went right over the
house. No damage to the roof (seal down shingles), but the neighbors lost
some shingles.
Guy to the East lost a whole tree and it took the top out of a big Oak tree
about 600 yards East.

We get straight line winds that are much worse and do far more damage.
This one took off a few shingles from a couple of the houses.

Roger (K8RI)>
> How far from your house was the tornado?
> Did it pass through your property? What was the damage to your roof
> shingles and house?
>
> 73 Tom

3494. Re: MFJ -247 HF SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 05:46:18 UTC
From: Steve <sgironx@home.com>
Message-ID: <KKWz5.27330$qM3.197186@news1.bnapk1.occa.home.com>
Source record: 179422
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

If you didn't figure it out.. here's a working link to the image

http://members.home.net/sgiron/mfj247.jpg

73
Steve
AD6GO

Remove X in address to reply

3495. Re: RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:29:42 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D04256.CBAC8800@oio.net>
Source record: 179423

Jeffrey Steinberg wrote:
>
> I have some major RFI coming from my atic-mounted dipole (about 25 feet
> away from home theater). After some suggestions I put some Palomar
> RFI beads (actually the split beads) around the speaker wires (monster-brand)
> right after they exit the stereo.
>
> Question: The speaker runs are quite long. Do I need to add more beads at the
> stereo end? If I do, will I still get it, and if so will puting them at the
> speaker ends (in the wall) help? The speakers are B&W large in-wall speakers
> (not sure of model number).
>
> I am considering a tripod mounted beam antenna that will raise the antenna
> another 10 to 15 feet from the dipole. Will that help much or still too close.
>
> Thanks. Running only 100-150 watts.
>
> --jeffrey steinberg, kc2guc

Jeff,
You might also try a 0.001mf@50v(?) across the speakers. Make
multiple
turns on the 'beads'. Moving the antenna further away always helps.
You
didn't say what frequency. If it's HF don't worry about the RF
exposure,
unless you sit on the antenna (literally!). VHF and UHF, the exposure
is
a different story...
'Doc

3496. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:35:36 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D043B8.8E876DED@oio.net>
Source record: 179424

Fractenna wrote:
>
> >
> >One persistent JERK has caused several people to leave the
> >group in disgust. This behavior continues and the JERK does
> >not appear to have a conscience or any self decency. This
> >really upsets me as I enjoy learning from several of the
> >experts provided that I can weed through the nonsense.
> >
> >Has the group ever considered going to a moderated group with a
> >reasonable posting policy? I know that many folks don't like
> >the idea of a moderated group but virtually everyone dislikes
> >the constant behavior of this one person who can't possibly
> >have so much free time and a job. This would fix most of the
> >problems and instantly reduce the number of posts by 1/6th
> >without loss of any content. Remember that this one bad apple
> >is responsible for 1/6th of the posts. I don't know who would
> >want the unenviable job of moderator. Am I way off base here
> >or do some folks actually enjoy this infantile behavior?
> >
> >Larry, W0QE
> >
>
> I think a moderated RRAA is a great idea Larry.
>
> If I had the time I would volunteer.
>
> 73
> Chip N1IR

That would be sort of like Batman handing the keys to the
batmobile to the Joker...
'Doc

3497. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:37:56 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D04444.540DE813@oio.net>
Source record: 179425

Joe Schlatter wrote:
>
> I was looking at the Hustler 40 meter mobile antenna in catalog last night
> and have a question.
>
> The catalog does not show a Hustler mobile antenna assembled nor does it
> tell anything about what parts one needs to purchase to make a complete
> antenna.
>
> As I figure it, I need:
>
> -- bumper mount
> -- spring
> -- mast
> -- resonator
>
> Appears that the spring screws into the bumper mount, mast screws into the
> spring, and the resonator screws into the mast. Change bands by changing
> resonators. The resonator seems to have a telescoping end that is used to
> adjust for operating freq. Is this correct?
>
> I travel a lot and am looking at purchasing a Hustler 40-m mobile and
> operate mobile plus run coax from motel room to car and operate from motel
> room.
> --
>
> Regards,
> Joe Schlatter

Joe,
That's about it! While I'm not much of a Hustler fan, what
you suggest will work okay.
'Doc

3498. Re: Hustler mobile ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:45:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D045EC.BCC5D201@oio.net>
Source record: 179427

Joe,
Should have mentioned this but forgot it. Most problems
with mobile antenna deal with a good ground to the vehicle,
especially on the newer ones. A ground strap from the
mount to the frame is a good idea. Using braid from coax
is not a good idea, it deteriorates in weather, ground varies,
the antenna acts 'weird'. Better to use copper strap or
something simular.
'Doc

3499. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:47:52 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D04698.957C7811@mwci.net>
Source record: 179426

Arthur Unwin wrote:

> If you engage him in a post then you get what you ask for.
> If you refute what he says then you assign a value to what he says
> If you debate him on a technical issue then you include him
> as one of your peers
> It is up to individual posters to determine if an association
> with him will be of value

There is another viewpoint that, in my opinion, goes a little beyond the surface.

In feedback control systems there is a thing called "damping factor". If a "pole" in the system is too close to the frequency axis, a small perturbation causes large oscillations that die out slowly, or can even result in "limit-cycling".

The fix for this is to add things to the feedback loop that stabilize the system (move the poles into a more stable region). Or to be careful how we energize the loop.

It is obvious to me that there is an analogous phenomenon here, a personality, a temperament, that is easily perturbed, tends toward overreaction and is not under adequate control. Invariably, the underlying factor is a psychological problem of some kind that I am not competent to evaluate and do not want to try to get into.

My personal opinion is that this individual, despite some behavior that many would call outrageous, deserves some compassion for the simple reason that there are certain facets in his makeup that are not fully understood, by him or by others, and are not in very good control. I am also convinced that each and every one of us has something that is not managed as well as we would like. It's true for me and it's true for everyone else that I am aware of. We are all humanoids, after all.

One thing that I do find here that I have often observed, and also experienced, is a tendency for a group, or possibly a clique within a group, to "gang up" on some individual who is *perceived* as "vulnerable" or "alien" in some respect.

Group dynamics can sometimes be rather ruthless. Ask any high school student. I see some of that here. The operating principle is that the group asserts itself as the "norm" and ostracizes and "goes after" those who who seem to be "deviant" in some way.

My basic opinion, regarding this individual, is that in my limited contact I have treated him with respect, and he has treated me with respect in return. And I do appreciate that. And I think he does too. And I find that very interesting.

And for this particular individual, I am certain that the button pushers have exacerbated his particular difficulty. I see no criminal behavior here, therefore I see a lot of room for a more humane tolerance and a more cautious approach that does

not push buttons and cause loop instability. Then we will see that he has contributions to make (I have seen some of them).

Bill W0IYH

3500. Re: antenna height roof vs ground

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-26 06:48:50 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D046D2.E1B4C605@oio.net>
Source record: 179428

Wayne Jones wrote:
>
> I want to put up a wire 20 m dipole for qrp cw. I have a 2 story house.
> Which would be the better of these 2 options:
> 1) a dipole strung from the edge of the roof (16 ft high) to a 16 ft pole at
> the edge of the property or
> 1) an inverted v strung across the top of the house supported in the center
> at 8 ft above the roof and sloping down at each end to a few inches above
> the roof.
>
> In the case of the inverted V, the coax feed line would be about 60 feet ,
> and with the first option, the feed line would be about 90 feet. (Should I
> be concerned about this?)
> Tnx
>
> Wayne Jones
> ve3 gqx

This is one of "those" questions that you really can't answer.
The only way to tell which would be 'best' it to try both of them,
there are just too many variables to guess. Not much help, but
shouldn't be that hard to try them both...
'Doc

3501. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39f985cd.460434629@news.seanet.com>
Source record: 179219

On Wed, 27 Sep 2000 18:02:11 -0500, CAM <cam2338@bigfoot.com> wrote:

>
>There is one train of thought that a conjugate match is achieved
>almost automatically by the combination of Rs and the non-dissipative
>load line inside the amplifier. In other words, the source impedance
>includes both the non-dissipative load line and the dissipative losses.
>Thus an amplifier can have an efficiency greater than 50% while
>maintaining a conjugate match, just as an antenna can have an
>efficiency greater than 50% when conjugately matched.

Hi Cecil,

It follows that if the source presents a cumulative Z that is 1/Z of
the cumulative Load, you have a conjugate.

It is rather facile and non-productive to strip the models down to the
point to prove Thevenin's generator (being perfect) couldn't possibly,
conjunctively, match to any load.

73's
Richard Clark, KB7QHC

3502. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000927195533.08976.00000711@ng-ff1.aol.com>
Source record: 179220

>On 27 Sep 2000 22:03:45 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>>Rick picked up on Yuri making the 3.5 trophy, but--he missed the report
>>>back in the back that also shows the BIG TIME, for Yuri.
>>>He is listed as the all-time record holder for North America, CW, on
>>>Topband,(1.8) which he set in '98.
>>>
>>>Bill-W4BSG
>>>
>>>
>>
>>Unfortunately working DX contests on 80 or 160 does not require the same
>skill
>>set as someone running a 10M contest.
>>
>>I, personally, don't think Yuri has sufficient skills to beat me.
>>
>>73
>>Chip N1IR
>
>Nice troll!
>

Watza troll?

Is this some on the air contest?

Does it use small dolls with wide eyes and frizzy hair:-)?

Or are you saying Yuri is some kind of under-the bridge nuisance?

73
Chip N1IR

3503. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39d28107.334350707@news.azstarnet.com>
Source record: 179221

On Wed, 27 Sep 2000 23:26:27 GMT, rwclark@seanet.com (Richard Clark) wrote:

[snip]

>
>The measure of RF Power by amateurs cannot be said to be any more
>accurate than 20% without a considerable investment in equipment,
>training, and NIST certification. Basically much the same could be
>said of amateur editing.

Gasp! Say it isn't so! Why just today I responded to a message on the
towertalk reflector wherein a gentleman claimed that he measured the line loss
on a 200+ft run of cable as 0.1 dB, using nothing but his "trusty" MFJ analyzer.

Sheese. Who needs NIST?

73,

Wes N7WS

>73's
>Richard Clark, KB7QHC

3504. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39d283cb.335058535@news.azstarnet.com>
Source record: 179222

On Wed, 27 Sep 2000 21:36:24 GMT, n7ws_nospam@arrl.net (Wes Stewart) wrote:

When I reads what came back to me I see that the columns in the results tables
were slightly messed up. I hope the following fixes the problem.

>For the case of lossless components, the following table describes the results
>of analysis after optimization:
>
> Freq RZ11 IZ11 VSWR MS21 RZ11 IZ11
> MHz ohm ohm dB ohm ohm
> LOAD LOAD I_MATCH T_NET REV REV
>
> 3.700 500.0 0.0 1.08:1 -0.01 495.3 38.9
> 3.725 500.0 0.0 1.04:1 -0.00 498.6 19.3
> 3.750 500.0 0.0 1.00:1 -0.00 500.3 -0.1
> 3.775 500.0 0.0 1.04:1 -0.00 500.3 -19.2
> 3.800 500.0 0.0 1.08:1 -0.01 498.7 -37.8
>
[snip]

>The results after optimization are as follows:
>
>
> Freq RZ11 IZ11 VSWR MS21 RZ11 IZ11
> MHz ohm ohm dB ohm ohm
> LOAD LOAD I_MATCH T_NET REV REV
>
> 3.700 500.0 0.0 1.07:1 -0.72 381.3 -9.3
> 3.725 500.0 0.0 1.04:1 -0.71 381.2 -20.9
> 3.750 500.0 0.0 1.02:1 -0.70 380.4 -32.3
> 3.775 500.0 0.0 1.05:1 -0.70 378.8 -43.3
> 3.800 500.0 0.0 1.08:1 -0.70 376.5 -54.0
>
>

Wes Stewart, N7WS

3505. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D288E0.40C81B55@hiwaay.net>
Source record: 179223

Jim- I went back to look at the "release" -- SURPRISE !! the date is 14 August, so is probably NOT Roy, since the posting on his site was yesterday.
This looks more and more like a championship TROLL, from the master-Baiter TROLL, the Chipster.

Bill

Jim Pennino wrote:
>
> Bill Aycock <baycock@hiwaay.net> wrote:
> > Wow! THe fractanal group strikes again- has found how to use Yahoo to
> > spam the world.
>
> > Does anyone know the URL and who the transgressor is? Washington state?
>
> > Bill-W4BSG
>
> <rest snipped>
>
> Well, this is just a guess, but...
>
> Roy volunteered to put various antenna files on his web site.
>
> Roy is in Washington.
>
> You will notice there is no directly identifiable person or organization in
> the "press release".
>
> Jim Pennino

3506. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D28E19.23070640@mwci.net>
Source record: 179224

Richard Clark wrote:

> On Wed, 27 Sep 2000 17:54:29 -0500, "William E. Sabin"
> <sabinw@mwci.net> wrote:
>
> >
> >The thing that is consistently (conveniently) ignored is that even if the tuner
> >is completely lossless, a conjugate match at the output of the tuner cannot be
> >achieved *unless* conjugate match at the output of the PA is also achieved. In
> >other words (in the above example), unless the output impedance of the PA is 50
> >ohms pure resistance. The validity of even a "theoretical" conjugate match in
> >the system is based on this crucial premise.
>
> Hi All,
>
> This above is a rather strained definition for Conjugate. Conjugation
> is simply the complex, inverse value of the load with respect to the
> source (or vice-versa). The presumption of a 50 Ohm requirement is an
> artificial constraint in anticipation of arguments that might follow,
> illustrating a typical (blackboard) case.

Definitly not true. Most transmitters are designed to operate correctly into50 + j
0 ohms, therefore it is quite natural to reference the discussion to that value.
Steve's example also did the same thing.

The complex conjugate of 50 + j0 is 50 - j 0.

> There are no typically 50
> Ohm antennas and as such nearly any antenna is compounded with
> reactance to achieve this value or other Resistive value is allowed to
> accumulate SWR as it is deemed inconsequential (the 37 Ohm perfect
> Monopole or the 73 Ohm perfect Dipole). Of course either of these may
> manifest 50 Ohms raw to the system, but that is a consequence of
> proximity to ground and confounds the statement above.

Nothing is confounded. The goal of a tuner is to *transform* the complex load to 50
+j0.

Bill W0IYH

3507. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D291B4.EB44D83@mwci.net>
Source record: 179225

CAM wrote:

> "William E. Sabin" wrote:
> > That 50 ohms output resistance is achieved in certain carefully rigged
> > experiments, or if the PA is designed specifically to have a 50 ohm output
> > resistance, for example by the use of negative feedback. In 95% or more of PA's
> > used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there is no
> > assurance of this whatsoever in vac tube or xistor PAs.
>
> There is one train of thought that a conjugate match is achieved
> almost automatically by the combination of Rs and the non-dissipative
> load line inside the amplifier. In other words, the source impedance
> includes both the non-dissipative load line and the dissipative losses.
> Thus an amplifier can have an efficiency greater than 50% while
> maintaining a conjugate match, just as an antenna can have an
> efficiency greater than 50% when conjugately matched.

It is true that the internal resistance is a "dynamic" lossless resistance, and it is true also that actual resistive tank losses modify the "net" value of internal resistance, but to claim that this process *assures* a conjugate match inside the amplifier is a "stretch" to say the least. It just simply cannot be guaranteed according to any kind of analysis that I can think of.

I am really amazed that anyone would try to force such a conclusion. What would be the motivation for it?

If an approximate match is OK, then OK, but let's spell it out. We must set the stage regarding what is exactly right and what is an acceptable approximation. We cannot be re-writing basic principles of mathematics and physics and Everitt's book to suit our own desires.

Bill W0IYH

3508. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Phillip Sikes <psikes@whidbey.net>
Message-ID: <jb35tskvcvs38hh7hiv140239cpkp1qc8n@4ax.com>
Source record: 179226

On Wed, 27 Sep 2000 17:38:51 -0500, CAM <cam2338@bigfoot.com> wrote:

>Will wrote:
>> While a horizontal loop, being omnidirectional, will by definition have
>> less gain in the direction of the main lobes of a dipole, if the loop is
>> mounted in the vertical plane, the pattern should be nearly the same as
>> the dipole, and exhibit 2-4 dB gain over the dipole.
>
>I don't think that's so, Will. Most of the single vertical loops
>that I have modeled showed slightly less gain and slightly wider
>beamwidths than dipoles for the same maximum height.

I must be missing something here. I am not an antenna guru by any
means but I have modeled a 40M Delta and a 40M dipole and the Delta
came out better by 1.8dB over the dipole. I was using Nec4Win to do
the modeling, is there a problem with this software?? I have run a 40M
verticaly oriented square loop fed in teh bottom center for a couple
of years now and it beats the pants off of any 40M dipole that I have
ever had up. In ON4UN's book, "Low Band DXing" he also mentions the
slight gain advantage of a vertical loop. Am I being duped or what??

Thanks for taking the time to help me out..

73 - Phil
N7UX

3509. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D2976D.F6F007FD@eznec.com>
Source record: 179227

I've never seen a delta loop with gain of 2-4 dB better than a dipole in any modeling I've done, with any program. In fact, most loops I've modeled are inferior to a dipole if the tops of the antennas are at the same height. The gains are often comparable, but the loops radiate at a higher angle because of the current flowing on wires closer to the ground. This is not to say you can't come up with a loop that's better than a dipole at the same maximum height -- I'm just saying that they're often worse.

As I understand it, NEC4WIN uses MININEC for calculations. Consequently, it can't be trusted if your model has horizontal wires lower than about 0.2 wavelength. It would also somewhat overestimate the resonant frequency of something with the geometry of a delta loop, but that wouldn't be important in this case. Otherwise, its results should be just fine.

For more about these and other limitations of MININEC see "MININEC: The Other Edge of the Sword", QST, Feb. 1991.

Like all modeling programs and methods, NEC also has limitations -- but different ones. You'll see many of these described in the EZNEC manual.

Roy Lewallen, W7EL

Phillip Sikes wrote:
>
> On Wed, 27 Sep 2000 17:38:51 -0500, CAM <cam2338@bigfoot.com> wrote:
>
> >Will wrote:
> >> While a horizontal loop, being omnidirectional, will by definition have
> >> less gain in the direction of the main lobes of a dipole, if the loop is
> >> mounted in the vertical plane, the pattern should be nearly the same as
> >> the dipole, and exhibit 2-4 dB gain over the dipole.
> >>
> >I don't think that's so, Will. Most of the single vertical loops
> >that I have modeled showed slightly less gain and slightly wider
> >beamwidths than dipoles for the same maximum height.
>
> I must be missing something here. I am not an antenna guru by any
> means but I have modeled a 40M Delta and a 40M dipole and the Delta
> came out better by 1.8dB over the dipole. I was using Nec4Win to do
> the modeling, is there a problem with this software?? I have run a 40M
> verticaly oriented square loop fed in teh bottom center for a couple
> of years now and it beats the pants off of any 40M dipole that I have
> ever had up. In ON4UN's book, "Low Band DXing" he also mentions the
> slight gain advantage of a vertical loop. Am I being duped or what??

>
> Thanks for taking the time to help me out..
>
> 73 - Phil
> N7UX

3510. Re: FS: 2 element 5 band quad antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: klopie <co@yok.com>
Message-ID: <39D298C1.64F28477@yok.com>
Source record: 179228
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace

What city are you in Bob?

Bob Williams wrote:

> FOR SALE: Lightning Bolt 2-element, 5 band (10-20m)quad antenna. As new,
> still in original boxes, never installed. No room for it at my present
> QTH now or for the next couple of years. $250 and you pay shipping from
> 97113..73, Bob

3511. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qu69hkdj1@slb0.atl.mindspring.net>
Source record: 179229

Thread:

As we can all plainly see... Chip has been "contesting" for most of his life.

I believe he must have been born "contesting"!

Too bad he contests so hard he can't seem to make and keep friends... on this NG! What?

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message news:20000927084039.21858.00000954@ng-cc1.aol.com...
> >
> >On 27 Sep 2000 03:32:08 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
> >
> >>>Congrats Yuri!
> >>>
> >>>Rick K1BQT
> >>>
> >>
> >>Thank you!
> >>
> >>Yuri, VC1A
> >
> >It's like having good sex Yuri. You got the trophy.
> >
> >Anyone can do a half-hour run once a week, but few have the stamina to
> >last at a sustained rate for 24 hours or more and not make an
> >occasional points-costing mistake.
> >
> >I suspect an experienced man like yourself would outdo any mouthy
> >little runt who can't see his knees without a mirror.
> >
> >73 Tom
> >
>
>
> Tom is absolutely right.
>
> Yuri would SEEM to have the ability to beat me in the 10M Contest.
>
> But he can't, because he cannot utlize his antenna and rig with the same
> versatility as I do. Furthermore, Yuri has never acheived the so-called 400

> plus Q/hr rates he refers to. Also, note he can't give a station and
contest
> where that was acheived.
>
> I will beat Yuri hands down.
>
> P.S. I was contesting before Yuri knew what a contest was.
>
> 73
> Chip n1IR

3512. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <hd75tskqe3mdjpaplnkdh8lkvdi5glnedm@4ax.com>
Source record: 179230

On or about 27 Sep 2000 21:55:57 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:
:U R CH1CKN!
:
:BAWK!!!
:
:73
:de N1IR

Sounds like a CB'er to me.

-SSB

3513. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qu62rlcn1@slb7.atl.mindspring.net>
Source record: 179231

Thread:

Yes, congrats Yuri, and to think that poor Yuri is only just an old TV repairman!

Peter [I bought my first ham station with money made from repairing TV's] K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message news:39d1e745.11196037@news.akorn.net...
> On 27 Sep 2000 03:32:08 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
>
> >>Congrats Yuri!
> >>
> >>Rick K1BQT
> >>
> > >
> > >Thank you!
> > >
> > >Yuri, VC1A
>
> It's like having good sex Yuri. You got the trophy.
>
> Anyone can do a half-hour run once a week, but few have the stamina to
> last at a sustained rate for 24 hours or more and not make an
> occasional points-costing mistake.
>
> I suspect an experienced man like yourself would outdo any mouthy
> little runt who can't see his knees without a mirror.
>
> 73 Tom

3514. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <dn6uq8.aq4.ln@mail.specsol.com>
Source record: 179232

Fractenna <fractenna@aol.com> wrote:

> Watza troll?

See Cohen, Nathan.

Jim Pennino

3515. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D29FAB.EBA@wt.net>
Source record: 179233

Yahoo! Finance wrote: A bunch of gibberish....

This thread is closed. MK
--
http://web.wt.net/~nm5k

3516. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D2A1F6.6334@wt.net>
Source record: 179234

Will wrote:
>
> Good idea. I think he is using a pair of mobile whips joined. A gamma
> match might do the trick, but I have no idea how to manufacture such a
> creature for a pair of whips!
>
> de Will KD7BFX

Maybe he could use a stub to tune. I don't use those that often, but they can be real handy. I can match almost anything to any line with the right stub. One problem I could see using the offset feed method, is a slight loss of balance. This while no big deal on normal size dipoles, might cause slight problems with a dual stick setup. Or at least as far as the pattern. He might be better off keeping the antenna equal on each side and using the stub. He would also need a 1:1 balun of some type. Could be as simple as a choke. I've got a puter program that will calculate the stubs. Makes it a snap. MK
--
http://web.wt.net/~nm5k

3517. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <8434-39D29F09-7@storefull-115.iap.bryant.webtv.net>
Source record: 179235

Bill Sabin, W0IHY wrote:
"Most transmitters are designed to operate correctly into 50 + j0 ohms, therefore it is quite natural to reference the discussion to that value."

Yes. The surge impedance of the coax most used with transmitters is the cause of specifying their performance into a 50-ohm resistor. The transmitter should be obliged to meet its specifications regardless of its internal impedance, if any or if near infinity. Maximum power transfer may not be required of a transmitter to deliver specified performance.

Naturally, an operator would not want to squander power in the feedline or matching networks.

If anything confounds me, it is the discussion of what amounts to an isolation pad to impedance match a transmitter to its antenna. If matching circuits are low loss, maximum power transfer makes sense. Broadcasters measure antenna impedance and install the conjugate matching network required to seamlessly connect the antenna with the feedline so that no power is reflected at the junction. The broadcaster can`t afford to waste any power.

Best regards, Richard Harrison, KB5WZI

3518. Re: FRACTAL ANTENNA: Congrats to KE6MWX

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qu8kuoie1@slb6.atl.mindspring.net>
Source record: 179236

Thread:

For the record...

On this NG I represent myself personally and no one else.

I use my personal email account which is paid for from my own personal funds to access and post to the NG. I use no corporate or company funds to support my NG activity.

I have only an amateur interest in this NG. This interest arrises from the perspective of one of my life long hobbies, amateur radio, in which I have participated for over 40 years. I have been an ARRL member for almost as long, and I am also a QCWA member with a 40 year pin.

I was born and raised in Canada, but now live, work and play in the USA and I am now proud to be a citizen of the USA. In case anyone doubts my amateur status and interests on this NG and for the record my call sign record is: VE1AEX, VE3DZK, VE2POB, AB4BC, and now K1PO.

Peter K1PO

PS:

OK, OK just to satisfy Chip's curiosity...

I have to confess to a certain commercial interest in antennas, but I would never allow that to taint my amateur interests and my objectivity. And so... I'll confess my commercial connection, by blood, to the antenna business here and now.

My brother Sam is not an amateur, rather he is a professional with a Ph.D. a graduate of Cambridge whose dissertation was in the field of electromagnetics and antennas. He lives and works in Europe and is also an adjunct at the Technion in Tel Aviv, where he sometimes collaborates with Lempel and Ziv. He is a member of the IEE and is a professional engineer. He left Canada to study in Europe and never returned. He does however support the rest of the Brackett family with the proceeds of his antenna company in Europe.

For you see, my brother Sam Brackett, owns and operates a successful antenna manufacturing company in Southern Europe located near the ETSI headquarters in Sophia-Antoplis.

Sam has recently patented a novel kind of antenna system which utilizes a honeycomb like physical structure based upon a famous pseudo-random sequence known as the Weiner Numbers. [Cfr. Dr. Norbert Weiner, MIT SP RPT, 17, 1944.

These "Weiner" antennas appear similar to fractal antennas but are based upon a set of pseudo-random functions first presented by Dr. Weiner, and form a new basis for electromagnetic theory which utilizes the eigenfunctions of the Weiner functionals to establish an orthonormal basis in the vector space over which the antennas are projected.

Because of the simplicity of the Weiner number generator, these antennas exhibit optimally compact time-space ambiguity functions which prove that they are superior to the common fractals as originally defined by Mandlebrot. These Weiner generator functionals exhibit compact support over specified time-space-frequency domains that allow direct synthesis to a global minimum, similar to signal design using the prolate spheroidal wave functions, and do not require dumb pattern searches or the use of GA methods to attempt to mitigate dumb searches stopping on local minima in the pattern searches.

Sam's new Weiner antennas should be available on the marketplace soon. He has found a unique method of manufacturing which uses the natural mechanical strength inherent in the designs because of Steiltjes measure of the Weiner number generator, whereas the mechanical robustness of fractal antennas emanates from the Rieman measure of the fractal geometry and as such is fatally flawed. According to Sam!

I hope this clarifies my commercial interests in antennas and should reassure all NG readers of my objectivity in critiqueing the pontifications of one N1IR!

Peter K1PO

.....

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:HJOz5.5$ai4.29838@news.ntplx.net...
> Fractenna <fractenna@aol.com> wrote:
>
> > Say, Peter, why don't you tell the folks who you work for and what you
> > represent?
>
> It would still not be clear that he is representing his employer in his
> posts. Employees do have personal opinions. For example, unless I am
> addressing matters related to the ARRL Lab, Product Review testing, RFI,
> etc., I am not representing ARRL when I post to newsgroups and reflectors.
> You are not representing BU, unless you are describing things related to
> your classroom, etc.
>
> 73,
> Ed Hare, W1RFI
>
>

3519. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D2A46E.7616@wt.net>
Source record: 179237

Tom W8JI wrote:
>
> On Mon, 25 Sep 2000 12:28:00 GMT, Dale Parfitt <GTE/parinc@GTE.net>
> wrote:
>
> >Hi Phil,
> >
> >Is this a 1 wavelength loop? If so, a 1 wave loop has slightly less gain
> >than a dipole- nearly identical pattern and at least when I modeled it,
> >the BW was a little less than a dipole. Given that, I would go with a
> >dipole.
> >
> >Dale W4OP
>
> I agree with Dave's overview.
>
> There is a misplaced notion that a full-wave horizonatal loop placed
> close tom earth has some gain or DX advantage over a dipole.
>
> That isn't true.
>
> Put up a dipole and save money. It will work just as well.
>
> 73 Tom

I pretty much noticed the same thing on 75m. I tried a horizontal loop hoping for a good NVIS type deal for close in coverage. It didn't really play as planned. Here anyway....I found the overall performance of a dipole and the horizontal loop at the same height almost identical. If anything, I prefered the dipole. I found for overall general use, the turnstile beat both of them. It's still my favorite general use 80m antenna. I've used those off and on since the mid 80's. Work great. MK
--
http://web.wt.net/~nm5k

3520. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <798uq8.fv6.ln@mail.specsol.com>
Source record: 179238

Roy Lewallen <w7el@eznec.com> wrote:
> I'm in Oregon, and I could care less about the huffing and puffing. It's
> just another childish troll.

> Roy Lewallen, W7EL

I've flown into SEATAC; aren't Oregon and Washington the same place? :-)

Jim Pennino

3521. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8qu8sp$22s$1@slb7.atl.mindspring.net>
Source record: 179239

NC means "Not Closed"!

This thread is...

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20000924134227.07667.00000587@ng-fc1.aol.com...
> >
> >Fractenna <fractenna@aol.com> wrote in message
> >news:20000923145257.17845.00000559@ng-fm1.aol.com...
> >> >Anyone with half a brain would realize that it is not, even if only by
> >the
> >> >continuous "This thread is closed" messages posted by yourself.
> >> >
> >> >Now go home and use the bathroom instead of peeing in the sandbox.
Leave
> >the
> >> >use of the newsgroups to adults.
> >> >
> >> >"Fractenna" <fractenna@aol.com> wrote in message
> >> >> This thread is closed.
> >> >>
> >> >> NC
> >> >
> >> >
> >> This thread is closed.
> >>
> >> NC
> >
> >Just gotta have the last word don't ya.....
> >
> >
> >
> >
> >
> >
> >
> >
> >
>
> This thread is closed.
>
> NC

3522. Re: Help with HF mobile antenna - SO-239 to 3/8" x 24?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Darren Ream <reamesq@swbell.net>
Message-ID: <39D2B729.913026B0@swbell.net>
Source record: 179240

Good news. I discovered that Comet makes (although no one seems to stock)
an SO-239 to NMO mount adapter (intended to allow NMO antenna to be used on
SO-239 mounts). I also discovered that Valor makes an NMO to 3/8 x 24
adapter. Two adapters and viola! This is probably going to be the easiest
and strongest solution. I do like the other ideas, especially the antenna
switch idea, and might try them after all. I have archived these posts for
future reference. For now, though, I am going to try these adapers.
Thanks to everyone for their thoughtful posts.
See you on 20 meters!
-Darren

sideband wrote:

> Fabrication might be the answer here... Got an idea for you...
>
> Get two PL259's and two reducers. Braze or solder the two reducers
> together at their butt ends. Get a short piece of RG8 Mini, and
> install in one PL259. screw the connected reducers into the first
> PL259. Line up the coax and screw on the second PL259. Solder it
> together.
> Now you'll have to figure some way to strengthen this arrangement.
> Maybe a small peice of copper pipe, slit at one end, wrapped around
> the center between the two PL259's and brazed or soldered in place?
>
> Now, go to the truckstop, or wherever you get your parts, and get a
> SO239-3/8x24 core. Screw it on to one of the PL259's you just put
> together. screw the antenna on the 3/8x24, and screw the other PL259
> into your mount.
>
> Hopefully it'll hold up, and work for you.
>
> 73's
>
> -SSB
>
> On or about Tue, 26 Sep 2000 20:56:24 -0500, Darren Ream
> <reamesq@swbell.net>, using the forum rec.radio.amateur.antenna did
> say:
>
> :I am trying to install a 20 meter hamstick on my automobile but am
> :having trouble. A Comet GR5V mount which I plan to use is already
> :installed on the trunk lip. Problem is, this mount has an SO-239
> :connector and the hamstick usesa 3/8" x 24 mount. All I need is a
> :SO-239 to 3/8" x 24 adapter but can't find it anywhere. Several
> :manufacturers make an NMO to 3/8", so I guess I could use one with a

> :SO-239 to NMO adapter if I could find one of those, but I can't! My
> :current GR5V mount was a bear to install. I have it and the coax
> :situated exactly where I want it and I also want to continue to use my
> :SO-239 antennas occasionally, so I don't want to have to change mounts
> :if I can help it.
> :If I could just find an SO-239 to 3/8" adapter, my problem would be
> :solved.
> :Anyone have any ideas?
> :Any suggestions would be much appreciated.
> :-Darren Ream, W5DKE

3523. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D2B72D.E47EF03D@bigfoot.com>
Source record: 179241

"William E. Sabin" wrote:
> It is true that the internal resistance is a "dynamic" lossless resistance, and it is
> true also that actual resistive tank losses modify the "net" value of internal
> resistance, but to claim that this process *assures* a conjugate match inside the
> amplifier is a "stretch" to say the least. It just simply cannot be guaranteed
> according to any kind of analysis that I can think of.

Well, I did say "almost" automatically. :-) Since the load-line is
dynamic, why is it surprising that it automatically adjusts itself
to the load? The dissipative source resistance is somewhat out of
our control but how about the non-dissipative dynamic source
resistance being effected by the load?

> I am really amazed that anyone would try to force such a conclusion. What would be
> the motivation for it?

No force required. I don't know how to keep a dynamic load-line from
being affected and effected by the load, do you? If the load-line
happens to correspond to the designed-for load-line seems maximum
power transfer is almost automatically guaranteed.

> If an approximate match is OK, then OK, but let's spell it out. We must set the stage
> regarding what is exactly right and what is an acceptable approximation. We cannot
> be re-writing basic principles of mathematics and physics and Everitt's book to suit
> our own desires.

I've only asked the question about ten times now. Exactly how close to a
conjugate match must we come to call it a conjugate match? If the load
pulling measurement results in a calculated source of 56 ohms into a 50
ohm load, is that close enough?
--
http://www.mindspring.com/~w6rca

3524. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D2C372.7EDC6734@hiwaay.net>
Source record: 179242

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. His "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

Fractenna wrote:
>
> >
> >Geez Chip, don't do that while I'm drinking coffee--right up the nose!
> >
> >Rick K1BQT
> >
>
> Don't do what?
>
> Please don't refer to a meat grinder this time.
>
> Thanks!
>
> 73
> Chip N1IR

3525. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D2C989.9C18D752@hiwaay.net>
Source record: 179243

Wayne, I am not an expert here, but, I have an opinion, based on a
lifetime of Engineering experience- The approach you desribe is not
likely to hold up for very long, especially in the climate you
mention.(4 ft frost line)
1. Conduit is not meant to carry much load- it is designed to be easily
bent, to conform to the path needed for wiring. It is intended to carry
very light loads, but to provide impact protection to electrical wire.
2. most "house" wire is soft and is easily stretched. In your climate-
the load in winter is expected to get pretty high, due to ice formation.
expect some stretch.
Why not spend just a little more and get better poles, and better wire?
it will hold up lots longer.

Good luck- Bill-W4BSG

Wayne Jones wrote:
>
> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
> be against my house and the other will be close to and guyed from the corner
> of my back fence.
> I am planning on using 3 10foot sections of electrical conduit, each section
> smaller than the next so the sections will telescope and can be clamped with
> about a foot of overlap. I think the sizes I saw at Home Depot were 1 1/4,
> 1, and 3/4 inches diam
>
> Does anyone know if the conduit is strong enough and how much guying is
> needed for a 30 foot mast?
> Also how would I secure the base of the mast taking into consideration that
> there will be frost down to 4 feet below ground in winter.
>
> I also saw post where someone suggested stripping electrical house wire to
> use for the antenna wire. I assume he meant stripping the outer casing
> containing the coated wires and not the insulation on the individual wires.
> Do you think this wire is strong enough to hang 30ft without stretching or
> breaking? Does anyone have any info or opinions on this?
>
> tnx
> Wayne Jones
> ve3gqx

3526. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <st5j0a7c9pv1f2@corp.supernews.com>
Source record: 179244

>
> I've only asked the question about ten times now. Exactly how close to
a
> conjugate match must we come to call it a conjugate match? If the load
> pulling measurement results in a calculated source of 56 ohms into a
50
> ohm load, is that close enough?

I'm beginning to understand why the old-timers used an RF ammeter
in the feedline for tuneup.

73,

John, K6QQ

3527. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D2CDFD.E2272D0B@oio.net>
Source record: 179245

Wayne,
Don't waste your time. Electrical conduit was never made to
withstand the types of strees an antenna mast has to withstand.
Conduit is never used for a structural member.
I understand the budget part, but invest in a couple of good
antenna masts that were made to do the job. Even so, at 30 feet,
plan to guy the masts (maybe more than one level). The old
saying, "It's better to over-do to start with than to re-do later",
really is true.
'Doc

3528. Re: Tower installation publications? Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D2CED2.1FE301ED@oio.net>
Source record: 179246

Zoran,
You might try contacting Rohn Tower. They used to have a
specifications publication that covered their towers and
installation specifications. No idea what it might cost now.
Lots of good stuff in there.
'Doc

3529. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <TabSORSSB6ClmdqaGMGkvnfKpyag@4ax.com>
Source record: 179247

On Wed, 27 Sep 2000 19:17:29 -0500, "William E. Sabin" <sabinw@mwci.net> wrote:

>
>
>Richard Clark wrote:
>
>> On Wed, 27 Sep 2000 17:54:29 -0500, "William E. Sabin"
>> <sabinw@mwci.net> wrote:
>>
>> >
>> >The thing that is consistently (conveniently) ignored is that even if the tuner
>> >is completely lossless, a conjugate match at the output of the tuner cannot be
>> >achieved *unless* conjugate match at the output of the PA is also achieved. In
>> >other words (in the above example), unless the output impedance of the PA is 50
>> >ohms pure resistance. The validity of even a "theoretical" conjugate match in
>> >the system is based on this crucial premise.
>>
>> Hi All,
>>
>> This above is a rather strained definition for Conjugate. Conjugation
>> is simply the complex, inverse value of the load with respect to the
>> source (or vice-versa). The presumption of a 50 Ohm requirement is an
>> artificial constraint in anticipation of arguments that might follow,
>> illustrating a typical (blackboard) case.
>
>Definitly not true. Most transmitters are designed to operate correctly into50 + j
>0 ohms, therefore it is quite natural to reference the discussion to that value.
>Steve's example also did the same thing.
>
>The complex conjugate of 50 + j0 is 50 - j 0.
>
>> There are no typically 50
>> Ohm antennas and as such nearly any antenna is compounded with
>> reactance to achieve this value or other Resistive value is allowed to
>> accumulate SWR as it is deemed inconsequential (the 37 Ohm perfect
>> Monopole or the 73 Ohm perfect Dipole). Of course either of these may
>> manifest 50 Ohms raw to the system, but that is a consequence of
>> proximity to ground and confounds the statement above.
>
>Nothing is confounded. The goal of a tuner is to *transform* the complex load to 50
>+j0.
>
>Bill W0IYH

Hi Bill,

The problem I was attending was the presentation of a definition of Conjugation by example instead of by meaning.

Certainly the definition can be reduced to your examples, and as dry as they are they serve little in the way of illustration. Take for instance, one of our non-engineering correspondents speculated the need for negative resistance to meet the definition. That one is so far off the scope because it conforms to a slavish shorthand (incorrectly applied) for the operation of conjugation.

The Complex Conjugate is defined as having the same magnitude as ï¿½ but having the negative
angle of ï¿½ such that:
if ï¿½ = a + jb
then ï¿½* = a - jb

I won't argue your assumptions for the source Z being 50 ï¿½j 0 in the sense that there is a
real part. I won't even argue that this real part is not close. It is a specific value, per specification supplied by the manufacturer; but even here I've seen qualifications as to how accurate that value is.

The point is that the artificial constraint to 50 Ohms will paint you into a rhetorical corner. For one, this valuation is correct for one power level only. It may hold at other levels by virtue of the buffering capacity of the output filter, but the manufacturer neither specifies that it will, nor warrants how well. This is not an issue of Conjugation luckily, but it becomes a practical problem when Cecil wants to measure it. You may have a rig that performs quite differently than his when you both run half power. You may even have rigs from the same manufacturer and still suffer validation problems.

As for
>Nothing is confounded. The goal of a tuner is to *transform* the complex load to 50
>+j0.
I would amend that to say:
The goal of a tuner is to *transform* the complex load to the complex source.

This is perfectly within the characteristics of the garden variety tuner and conjugation has no mandate to render a purely resistive solution. Aside from the problems of metering, the average tuner is a symmetric device and antenna and transmitter connections can be freely swapped.

That complex source *may be* 50 Ohms. Frequently that complex source *may not be* 50 Ohms. My own rigs present between 35 and 70 Ohms depending on band and power level. With the R fluctuating, the output filter is no longer matched and is probably casting reactance into these valuations. Thus we have a complex source with one of my examples possibly exhibiting a Z of 35 - j12 Ohms (contrived I will admit, but a distinct possibility).

50 Ohms as a source Z is convenient, attainable, but hardly the logical link pin in any conjugation based argument and worse, presents logistical nightmares in experimental verification. It is much simpler to report the data and let the math shake out the conjugate.

73's
Richard Clark, KB7QHC

3530. Re: Car Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <8qs4l6imf1@news.hawaii.edu>
Source record: 179248
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf

Guys, a compromise between glass-mounted and exterior-mounted antennas is this: Take the end of your feedline and remove about 19 inches of the outer cover; at that point separate the inner conductor from the copper braid and run them opposite to each other and perpendicular to the feedline, taping them to your rear window:

```
inner cond. copper braid
-------------||--------------
||
||
|| coax feedline
||
||
```

It's nothing but a 2m dipole made entirely from the last 19 inches of your feedline, taped to your car's back window. If the horizontal orientation bothers you, run the two legs at a 45 degree angle from the vertex (where the conductors separate) with that point taped to the base of the window:

```
\ /
\ /
\ /
\ /
\/
||
||
||
```

No muss, no fuss, no damage to the car, and much better results than the glass-mounted "dummy load."

It makes a fine indoor antenna at home, too; mount it as a vertical dipole taped to a window.

73, Jeff KH6O

3531. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D25BED.5EA57360@hiwaay.net>
Source record: 179269

Wow! THe fractanal group strikes again- has found how to use Yahoo to
spam the world.

Does anyone know the URL and who the transgressor is? Washington state?

Bill-W4BSG

"Yahoo! Finance" wrote:
>
> Dr. Nathan Cohen, PhD (fractenna@aol.com) has sent you a news article
>
> Personal message:
>
> Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright
> Violation to Radio Ham
> http://biz.yahoo.com/bw/000814/ma_fractal.html
> ----------
>
> [Yahoo! Finance]Home - Yahoo! - Help [Business Wire]
> ----------
>
> [Business US Market | By Industry | IPO | AP | S&P | International |
> PRNews | BizWire | CCN | CNW]
>
> ----------
>
> Monday August 14, 10:04 am Eastern Time
>
> Press Release
>
> Fractal Antennas: 'Cease and Desist'
> Notification of Copyright Violation to Radio
> Ham
>
> BOSTON--(BUSINESS WIRE)--Aug. 14,
> 2000--Fractal Antenna Systems, Inc., has
> sent notification to a radio amateur to
> cease and desist in the public dissemination
> of a fractal antenna web page which falsely mirrors it's recently
> posted addition.
>
> The company holds a proprietary IP position, including several pending
> patents, on fractal-element antenna (FEA) and related technology. FEA
> have been shown to have distinct advantages in virtually all areas of

> antenna applications, especially in the wireless, broadband, and
> telecommunications arenas.
>
> Nathan Cohen, Ph.D., CTO and Chair of the company explained the
> concern over the violation: ``Recently, Fractal Antenna Systems, Inc.
> graciously added a new addition to its web site, so that radio
> amateurs can benefit and learn from the `disruptive' antenna
> technology afforded from fractals. Unfortunately, a radio amateur in
> Washington State decided to extract the copyright material and
> produced his own direct and derivative version, without authorization.
> No permission request was made, and the material posts inaccurate
> statements which make the technology appear to do exactly the opposite
> of what it accomplishes. Further, he publicly and globally announced
> his unauthorized site over USENET, with deleterious effect to the
> original site, and wide spread distribution.''
>
> Cohen added: ``We have grave concerns that such a malicious effort
> undermines the good rapport that the company has with the global radio
> amateur community, many millions strong, and also with its customer
> base. Such a malicious effort is further being made at a time when the
> company's first patent has received a notice of allowance, and thus
> imminent issuance. The bogus site makes no mention of the nature of
> this and other pending patents with respect to the antenna, thus
> misleading the reader to consider that the technology is within the
> public domain, which it is not.''
>
> Cohen notes that the company has allowed radio amateurs permission to
> build and experiment with the posted antenna design. The radio amateur
> in violation has neither built nor tested the design, but made
> inaccurate and misleading statements which do not support the measured
> or modeled results.
>
> ``We strongly support the excitement and learning which our new
> technology engenders--with hams, students, hobbyists, and others.
> However, malicious and illegal efforts to present and misrepresent
> such will lead to legal proceedings as necessary. We continue to
> invite radio amateurs and others to view and experiment with fractal
> antennas for private, non-commercial use without sale, and will
> continue to post new material of interest in non-commercial contexts.
> However, unauthorized use of copyright material; failure to attribute
> IP, and so on, are deleterious to the efforts of the firm and cannot
> be allowed'', stated Cohen.
>
> Cohen finally added that additional web site holders will be informed
> of any copyright violations and failure to attribute the technology
> and its pending patent status.
>
> Fractal Antenna Systems, Inc. is a privately held Florida corporation,
> with its principle base at Telecom City in Massachusetts. It's web
> site may be accessed via http://www.fractenna.com.

> --------------
> Contact:
>
> Fractal Antenna Systems, Inc.
> Phil Salkind
> 617-381-9595
>
> Email this story - View most popular stories emailed
>
> -----------------------
> Related News Categories: computer hardware, computers, telecom
> -----------------------
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> posting, emailing, faxing, archiving ina public database,
> redistributing via a computer network or in a printed form.
> Questions or Comments?
> -- Posted from bulk3.yahoo.com [204.71.202.111] via Mailgate.ORG
> Server - http://www.Mailgate.ORG

3532. Re: no new postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39D233EA.41C67EA6@my-deja.com>
Source record: 179270

frank jones wrote:
>
> This is sort of a test. I've received no new material the last couple
> of days. Is anyone else having similar problems.
>
> 73 Frank N5MMB

Well then, this is sort of an answer. I haven't seen anything
in the past 10 minutes, but there has been lots of stuff here
the last couple of days. I'm sure that your news server is
different than mine, so yours is probably having problems.
Check with your ISP or the usenet service provider.

Martin K7MEM

p.s. Do not respond directly to this post. DejaNews is having
E-Mail problems. Use the address below if you send directly
to me.

--
Martin E. Meserve K7MEM martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3533. Cliffdwreller Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bobby Raymer <n2br@citlink.net>
Message-ID: <MatA5.162$y07.10318@news-west.eli.net>
Source record: 179271

anyone had any luck with the CliffDweller dipole antenna

from n2br@citlink.net

3534. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39eb5ed9.450462370@news.seanet.com>
Source record: 179272

On Wed, 27 Sep 2000 21:36:20 +0100, "John Burrell" <john@tg8ozh.com>
wrote:

>
>When I decide on the best compromise I'll probably build rather than buy but
>the starting point for this 'quest for the holy grail' is a tad elusive. My
>present intentions would be to try for 40, 20, and 15 metres. The vehicle is
>a Toyota 4-Runner so there would be a reasonable ground plane for a roof
>mounted antenna, at least in comparison with most modern European cars. I
>have an Icom 706 which is currently used for 6 metres so users of Icom
>autotuners may have good input also.
>
>Sorry to waffle on but if you have any useful information or experiences I
>would be very pleased to read about them.
>
>If you made it this far thanks for your patience and 73, John G8OZH
>

Hi John,

We both drive the same rigs. The shell on back is fibreglass (if it
isn't the newest of models - mine's an '88) and you could conceivably
build a radiator inside, beneath the shell for maximum "invisibility."
A wild notion of mine would be to delta or gamma match the roll bar!
I have two mounts on both rear quarter panels installed underneath the
shell and on top of the lip. One is currently sporting a full-size 6M
whip, so there's no sport in that (be careful tho' because the
tailgate down or up makes a significant difference). I haven't used
the other one yet, but was planning something for HF (once I get an HF
rig inside - not a simple thing in these small cabs).

Another thought is that the SGC tuner would easily ride inside and
perform just as well with the lead snaking out through a "small" hole.
However, from the tenor of your note, SGC doesn't sound like a
purchase option though, and I figure you probably have one of the
newer models of the 4-Runner that blasts away my presumptions :-(

73's
Richard Clark, KB7QHC

3535. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D26281.CF1FEA22@earthlink.net>
Source record: 179273

Good idea. I think he is using a pair of mobile whips joined. A gamma match might do the trick, but I have no idea how to manufacture such a creature for a pair of whips!

de Will KD7BFX

Mark Keith wrote:

As far as the
> match being 1.8 to 1, and limiting usuable bandwidth, thats fairly
> common, and I think could be cured by just shifting the center point of
> the antenna a tad until he gets a better match. Should be able to get it
> 1:1 with a little tweaking. I've done this many times on other dipoles.
> MK
> --
> http://web.wt.net/~nm5k

3536. Re: Help with HF mobile antenna - SO-239 to 3/8" x 24?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: bigkid <bigkid@interaccess.com>
Message-ID: <st4ond8f19da41@corp.supernews.com>
Source record: 179274

Here's an idea if you just don't want to run another cable from the trunk to the radio. Install another antenna mount, a 3/8 x 24, on the trunk lip and cut both coax cables from the antenna mounts and install PL259's on all the ends. Then buy a two position antenna switch, and mount it in the trunk so you can select either the PL259 mount or the 3/8 X 24 mount to connect to the radio.

Bob, K9YA

3537. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <wjtA5.8913$tl2.652191@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179275

"Richard Clark" <rclark@epicedge.com> wrote in message
news:39e83418.439517102@news.seanet.com...
> On Wed, 27 Sep 2000 13:24:21 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
>
> Obviously I responded to the wrong posting with my earlier jest - you
> have already engaged with Cecil.
>
> However, this subject deserves its own thread with a subject line like
> "The Failure of Conjugation." You can rest assured that Cecil, unlike
> other debaters you've engaged here, will not infer your (my) choice of
> wording as a slander against his virility. (Then again he might, but
> we can all count on his humor to deflect that rather than taking you
> to court.)
>

Hi Richard:

In discussing this subject previously on the NG, Cecil and I went through a few rounds of somewhat inappropriate posts. Both of us being equally responsible in this regard. In looking at some of Cecil's other posts here and elsewhere, I have come to appreciate his humor and understand his method of engaging in a discussion better. Had I understood this better in the earlier discussion, I think I could have avoided fanning the flames from my end.

>
> Would you care to enunciate how loss makes a difference to the
> question of conjugation? Simply stating
> >This issue comes down to understanding theory more than practical
reality.
> cannot (without very careful crafting) disengage the two.
>
> 73's
> Richard Clark, KB7QHC

I will address this issue relative to Walt's and my QEX letters. I may suggest a few exercises to the students at home who are really interested in the subject.

It is a given that a "conjugate match" exists when maximum power is being delivered from a fixed source to an adjustable load. The first point to make is that we must identify an arbitrary location in the transmission line system where the conjugate match is defined to occur. For now, let's define it at the output terminals of the transmitter. When the load

impedance connected at the terminals of the transmitter is adjusted such that maximum power is being delivered from the transmitter to the load, the load impedance will be the conjugate of the transmitter's output impedance. By definition, for maximum power transfer, the impedance looking to the right from our arbitrary point must be the complex conjugate of the impedance looking to the left from the same point. Note that one impedance is determined looking in the forward direction and the other is determined looking in the rearward direction. The forward impedance would be measured by connecting an analyzer to the transmission line input and the rearward impedance would be measured by connecting an analyzer to the transmitter output terminals (not recommended unless you don't need that analyzer anymore). Calculation of the impedances is performed in a similar manner.

In a lossless transmission line system, a conjugate match established at one point in the system established a conjugate match at every point in the system.

In a transmission line system with loss, a conjugate match can be established at any point in the system. However, establishing a conjugate match at any one point in a lossy system does not establish a conjugate match at every point in the system.

Now, let's relate these concepts to the discussion of the lossy T-network. The issue is simply the following, does creating an impedance match at the input terminals of the lossy T-network immediately establish the existence of a conjugate match at the T-network output. Stated another way, does establishing an impedance match at the T-network input create the condition of maximum power transfer to the load connected at the T-network output?

Establishing a ZO impedance match at the T-network input will establish a conjugate match at the T-network input if the impedance seen looking rearward towards the transmitter from the T-network input is also ZO. However, a conjugate match will not be established at the T-network output. To establish a conjugate match at the T-network output, the impedance looking forward from the T-network output must be the complex conjugate of the impedance seen looking rearward into the T-network output. A conjugate match can be established at the T-network output through component value adjustment but an impedance match will not exist at the T-network input. Proof of these statements
requires more time than available in this post. I would be pleased to send info to anyone interested or provide it in a later post.

The implication of the statements in the preceding paragraph is that more power can be delivered to a load at the lossy T-network output with a mismatch at
the T-network input than with a match at the T-network input. This can be verified through measurement or calculation. Connect a somewhat high SWR load to your
tuner and establish an impedance match at the network input. (A load with an R less than Zo works best as more loss will develop in the tuner). Measure the forward and reflected power at the tuner output. The power delivered to the transmission line is Pforward - Preflected. Now adjust the

tuner components for maximum forward power in the transmission line. In this case more power is delivered to the transmission line (maximum power hence the CM) but an impedance match will not exist at the tuner input. This measurement may be difficult depending on the losses in the tuner (the lossier the better for illustration) and the resolution of your power meter. Mathematical proof of these concepts will be provided in a later post.

As for the impedance calculations described in the QEX letters, here's a simple
exercise:

Assume the load at the tuner output is 150 + j50 ohms. Now design your own lossy T-network circuit (pick some reasonably low Q's) to achieve a 50 ohm matched input impedance at the T-network input. Next, use the method described by Walt to determine the T-network output impedance. It should calculate the output impedance to be 150 - j50 ohms. Next, adjust the component values (keeping Q constant) to change the input impedance to any other purely resistive value. An impedance match will no longer exist but now calculate the T-network output impedance using Walt's methods.

73,
Steve VE9SRB

In the interest of open exchange, anyone in contact with Walt can forward this message to him.

3538. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D26159.FAD0BBC3@earthlink.net>
Source record: 179276

Indeed, AEA is out of business, and the Isoloop is no longer available. MFJ does make a similar small transmitting loop, but at nearly $400 for the 40-15 version, it is pricey (there is a German firm that sells them also, "DAK" or "DAL" I think, and they look much better made, and better specs in nearly all respects, but even more $$$) and since John has the run of the rooftops (like many streets in Brooklyn, the buildings are all connected), a full-size, "conventional" antenna is in order.

I have homebrewed two magnetic loops, and while their performance is quite remarkable relative to their size, they present several fairly severe compromises that anyone with adequate space need not accept. In addition to being touchy to tune, as has already been mentioned, their efficiency on 40 and 30 is low, on the order of 12-15%, and you are restricted to an absolute maximum of 150W in transmitting (using any of the commercial available models). The real problem on 7 MHz and below is the 3 dB bandwidth of the antenna. MFJ does not publish much info on this subject, but I found my clone to clip SSB signals on both TX and RX, as would be expected, even though I "overbuilt" my loop [3M diameter, 1.5" *copper*tubing, higher voltage cap, less minumum and more maximum capacitance]. Getting a one-meter diameter loop to pass 3 KHz of signal below 14 MHz is impossible, saving perhaps the use of unmanageably wide diameter conductors (12"?).

The second of my two loops had a diamter of 3.5 meters, and did load on 80, with much broader SWR BW on 40 than the first one, on the order of 10 KHz, which was essentially a homebrew clone of the MFJ (using a homebrew "trombone-style" variable capacitor with a 40 mil PTFE dielectric, instead of the butterfly air vairable MFJ uses, and constructed of copper reefer tubing instead of aluminum). Because of the PTFE dielectric, both loop caps had breakdown voltages, in theory, of about 40 kV. I never measured them, but managed to feed 500W CW into the larger model on 80M with no signs of arcing or puncture, over a period of several months. This larger loop was constructed in an attempt to have fun and learn the limits of the small loop design, but at more than 10 feet across, much of the main advantage of magloops, small size, was lost.

Unless you have space restrictions, or demand instant portability, the small transmitting loop is not a great choice as a principle HF antenna. It is still fun to play with, and to hear the comments of the people you work on it, but when you have support structures, and literally hundreds of linear feet to play with, a conventional vertical or dipole, or other wire antenna, is the better bet.

de Will KD7BFX

Roland S Geter Sr wrote:
>
> I used (and still have) an AEA Isoloop that worked real well on a 3 story
> apartment while on a consulting job in northern CA. It is a very good
> antenna but requiring care while tuning. AEA added a Isotuner with DOS
> based software that makes it a lot easier. Disadvantage is maximum of 150
> watts and also I think they are now out of business. I recently saw one
> of these computer versions sold for around $200 here on newsgroup. There
> are a couple still made by other manufactures.
>
> Roland S Geter Sr - WB6LNA
> Scottsdale AZ 85253-4421
>
> John Przychocki wrote:
>
> > I'm looking into verticals that work on an 8 story building? It'll be
> > about 120" up and with a contast wind. I live in brooklyn, NY about 2
> > blocks from the water (NY Bay).
> > I see that the ants. are a big tall, so I'm worried about wind since
> > most look like multiple sections. And if the antenna has radials,
> > those would have to be at least 10 feet off the roof (Fire code). I
> > have an old Shakespeare Big Stick CB antenna that I have been using on
> > 10m and the top half on that bends a lot and quite often I see the top
> > section doing a 90 degree bend
> >
> > ANy help would be appreciated.

3539. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D266E4.26B9936F@earthlink.net>
Source record: 179277

I think it is a rather extreme interpretation to say that the QEX editorial policy on fractal antennas, if one does exist, is an attempt to prevent a new technology from reaching market. Such conspiracies are largely impossible to maintain, if the technology being supressed *really* offers the degree of improvement and benefit that is claimed for it, especially when design and construction info is so readily distributed via the internet, and in the case of fractal-shaped antennas, homebrewing presents no particular problems. However, it seems more reasonable to me that the editors of QEX are just being skeptical, as they should be of a newer idea. I do find fractal antenna theory intriguing, and hope the theory someday bears *full* fruit. having more hams experiment with fractal designs would certainly help to find out whether fractal antennas have a real permanent place in mainstream use, especially at HF.

In the field of antennas in particular, there has been so much hucksterism and snake-oil sold over the years (can you say CFA?), that editors who wish to maintain the integrity of their publication might understandably be reluctant to publish any articles on the subject that aren't accompanied by *scrupulous* documentation and repeatable results. That is pretty much the standard of any scholarly and/or peer-reviewed journal, even if the audience is principly hobbyists. Perhaps the author of this promised fractal antenna article has satisified these prudent requirements, and thus they are willing to publish it. Take a look at a recent issue of "73" magazine if you have any doubts what can happen to a magazine that doesn't maintain reasonably rigorous standards in accepting and publishing technical articles.

What issue will the fractal article appear in? I don't regularly buy QEX, but I'd like to at least sneak a peek at it at HRO when it comes out.

de Will KD7BFX

Fractenna wrote:
>
> In a major shift in its position, the ARRL has made a policy decision to run a
> fractal antenna article in QEX (an ARRL publication), according to Doug Smith,
> editor.
>
> In the past, the ARRL has called the submission of a fractal antenna MS "an
> April Fool's joke" and has not published any fractal antenna articles in its
> publications, since this original submission in February 1994.
>
> The author is known to many on this NG.
>

> I will be happy to publicly critique said article, just as I have in the past,
> on the ham page web site reviewing other fractal antenna articles for hams.
> This site gets over 4000--7000 different vsiitors, on average, a month. This is
> approximately the same number of subscribers as found in QEX.
>
> There are some details to be worked out regarding intellectual property. Still,
> it is important to realize that the ARRL has REVERSED its policy
> decision--which effectively attempted to prevent this important new technology
> from being accessed informationally by its members.
>
> Perhaps you may wish to let Doug know your feelings on this matter. His e-mail
> is:
>
> dsmith@sedona.net
>
> It's good to see our League opening it's eyes to new technologies!
>
> 73!
> Chip N1IR

3540. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o6otq8.fbj.ln@mail.specsol.com>
Source record: 179278
Body handling: HTML body converted to readable text

Yahoo! Finance wrote:

> Dr. Nathan Cohen, PhD (fractenna@aol.com) has sent you a news article

So now the twit is posting html to a newsgroup...

I had to read this three times to figure out what the hell he's complaining about; usual Chip marginal English construction.

Looks to me like the first real harrassment law suit born of this newsgroup is going to be filed by someone other than the "scientwist".

Jim Pennino

3541. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <39D26B3C.4290@bellsouth.net>
Source record: 179279

Larry, I'm with you.

I have been reading this useless flame war for several weeks now. I hold no ill will towards anyone. BUT I am tired of FRACTENNA this, FRACTENNA that! Flame here, insult there! I have considered not coming here anymore for this very reason. It is infantile and useless. If it keeps up, I just won't read the newsgroup anymore.

Jerry
K4KWH

Larry Benko wrote:
>
> One persistent JERK has caused several people to leave the
> group in disgust. This behavior continues and the JERK does
> not appear to have a conscience or any self decency. This
> really upsets me as I enjoy learning from several of the
> experts provided that I can weed through the nonsense.
>
> Has the group ever considered going to a moderated group with a
> reasonable posting policy? I know that many folks don't like
> the idea of a moderated group but virtually everyone dislikes
> the constant behavior of this one person who can't possibly
> have so much free time and a job. This would fix most of the
> problems and instantly reduce the number of posts by 1/6th
> without loss of any content. Remember that this one bad apple
> is responsible for 1/6th of the posts. I don't know who would
> want the unenviable job of moderator. Am I way off base here
> or do some folks actually enjoy this infantile behavior?
>
> Larry, W0QE

3542. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D26906.CCBFD92C@earthlink.net>
Source record: 179280

While a horizontal loop, being omnidirectional, will by definition have less gain in the direction of the main lobes of a dipole, if the loop is mounted in the vertical plane, the pattern should be nearly the same as the dipole, and exhibit 2-4 dB gain over the dipole. Since the Super Loops that RadioWorks sells are marketed as vertical loops, I think that ought to be the basis for comparison. If you want cover all of 3500-4000 KHz, a fullwave loop ought to be a bit easier to match and a bit more efficient as well.

de Will KD7BFX

Dale Parfitt wrote:
>
> Phillip Sikes wrote:
>
> > Hello to the group. I have been looking at the Radio Works Super Loop
> > 80 and was wondering if anyone has had any experience with the
> > antenna. My main interest is using it for 80M DXing so don't care too
> > much about the other bands and how they react.
> >
> > 73 - Phil
> > N7UX
>
> Hi Phil,
>
> Is this a 1 wavelength loop? If so, a 1 wave loop has slightly less gain
> than a dipole- nearly identical pattern and at least when I modeled it,
> the BW was a little less than a dipole. Given that, I would go with a
> dipole.
>
> Dale W4OP

3543. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: n7ws_nospam@arrl.net
Message-ID: <39d267e7.327917649@news.azstarnet.com>
Source record: 179281

On Wed, 27 Sep 2000 18:28:58 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

[snip]
>
>Actually, I would enjoy a reasonable discussion of the subject. It would
>clearly have to remain technical and focus on the relevant issues. (not to
>insinuate that I don't divert from these myself at times) I certainly do
>not want to involve myself in a discussion where it turns into "Walt's
>right, you're wrong" or vice versa. The discussion should be able to focus
>on the technical aspects of the subject.
>
>73,
>Steve, VE9SRB

I don't claim the intellectual capability to get in the middle of a discussion with the likes of Walt, Steve, Kevin, et al.

Lacking such capability, I often rely on "crutches", in this case I will use ARRL Radio Designer (ARD). I will assume Ulrich Rohde and his cohorts implemented the correct mathematics and will proceed with the following, that I offer without comments other than those necesary to explain my method.

Here is the netlist that describes a (C-L-C) t-network network "tuner." The values below are for ideal components, i.e, the component Qs are infinite.

```
*************************************************
* Define some values that will be allowed to change
* during optimization.

BLK
C1:?10PF 278.109PF 500PF?
C2:?10PF 482.114PF 600PF?
L1:?.2UH 6.78066UH 26UH?
END

*************************************************
* Create an output load for the network using the
* impedance defined at the end of the file.

BLK
IMP 1 0 IMP_TERM
LOAD:1POR 1
END

*************************************************
* Define the netlist for the t-network.
```

```
BLK
CAP 1 2 C=C1
IND 2 0 L=l1
CAP 2 3 C=C2
T_NET: 2POR 1 3
END

*****************************************************
* Connect the load to the t-network output and
* define the whole thing as a one port. Looking
* into this will show what the load on the
* transmitter will be. The optimizer will adjust
* the network to minimize the VSWR here.

BLK
T_NET 1 2
LOAD 2
I_MATCH: 1POR 1
END

*****************************************************
* This block is used to look into the t-network
* output port and see the impedance when the
* input is terminated in 50 ohm. If there is a
* true conjugate match then this should be the
* complex conjugate of the load impedance defined
* below.

BLK
RES 1 0 R=50
T_NET 1 2
REV: 1POR 2
END

*****************************************************
* This defines a frequency sweep

FREQ
STEP 3.7MHZ 3.8MHZ 25KHZ
END

*****************************************************
* Here the optimizer is set up to adjust the network
* for best input match while also minimizing
* insertion loss.

OPT

* The following section sets the input match goal

I_MATCH
F=3.75MHZ
MS11=-40db LT w=10
```

```
* The following ensures that a "bad" set of values
* that hurt insertion loss is not selected.
* The port impedances are set to match source and load.

T_NET
Z1=50 0 Z2=IMP_TERM
F=3.75MHZ
MS21 = 0DB W=1

END

************************************************
* Here define the characteristics of the load R +jX

DATA
IMP_TERM:IMP
500 0
END
```

As defined, the t-network is set up to present a 50 lom load to a transmitter while it is terminated in a purely resistive 500 ohm load. This is an entirely arbritary but useful example.

For the case of lossless components, the following table describes the results of analysis after optimization:

```
Freq RZ11 IZ11 VSWR MS21 RZ11 IZ11
MHz ohm ohm dB ohm ohm
LOAD LOAD I_MATCH T_NET REV REV

3.700 500.0 0.0 1.08:1 -0.01 495.3 38.9
3.725 500.0 0.0 1.04:1 -0.00 498.6 19.3
3.750 500.0 0.0 1.00:1 -0.00 500.3 -0.1
3.775 500.0 0.0 1.04:1 -0.00 500.3 -19.2
3.800 500.0 0.0 1.08:1 -0.01 498.7 -37.8
```

The loss in the system is zero and the impedance looking back into the network is the conjugate of the load Z.

If portions of the circuit are changed as follows, non-ideal components are used and there is now loss in the system:

```
BLK
C1:?10PF 303.183PF 500PF?
C2:?10PF 594.289PF 600PF?
L1:?.2UH 6.41898UH 26UH?
END

************************************************
* Define the netlist for the t-network with lossy components

BLK
CAP 1 2 C=C1 Q2=500 F=4MHZ
IND 2 0 L=l1 Q2=20 F=4MHZ
CAP 2 3 C=C2 Q2=500 F=4MHZ
```

```
T_NET: 2POR 1 3
END

************************************************

The results after optimization are as follows:

Freq RZ11 IZ11 VSWR MS21 RZ11 IZ11
MHz ohm ohm dB ohm ohm
LOAD LOAD I_MATCH T_NET REV REV

3.700 500.0 0.0 1.07:1 -0.72 381.3 -9.3
3.725 500.0 0.0 1.04:1 -0.71 381.2 -20.9
3.750 500.0 0.0 1.02:1 -0.70 380.4 -32.3
3.775 500.0 0.0 1.05:1 -0.70 378.8 -43.3
3.800 500.0 0.0 1.08:1 -0.70 376.5 -54.0

Summary (according to ARD):

When lossy components are used, there is--no surprise--loss in the network and
the view looking back into the output of the network no longer is the conjugate
of the load Z.

Respectfully submitted

Wes Stewart, N7WS
```

3544. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D268C1.49F7A2F2@bigfoot.com>
Source record: 179282

Richard Clark wrote:
> However, this subject deserves its own thread with a subject line like
> "The Failure of Conjugation."

According to some, it might better be named "The Mortal Sin of
Conjugation". :-)

> You can rest assured that Cecil, unlike
> other debaters you've engaged here, will not infer your (my) choice of
> wording as a slander against his virility. (Then again he might, but
> we can all count on his humor to deflect that rather than taking you
> to court.)

If I detect any negative emotional response, I simply switch to
another of my numerous multiple personalities. It's great to have
a whole team at my disposal. :-)
--
http://www.mindspring.com/~w6rca

3545. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000927175557.29694.00000359@ng-mf1.aol.com>
Source record: 179283

>
>Chirp wrote post full of fructal horse puckeys:
>
>>
>>Yuri would SEEM to have the ability to beat me in the 10M Contest.
>>
>>But he can't, because he cannot utlize his antenna and rig with the same
>>versatility as I do. Furthermore, Yuri has never acheived the so-called 400
>>plus Q/hr rates he refers to. Also, note he can't give a station and contest
>>where that was acheived.
>>
>>I will beat Yuri hands down.
>>
>>P.S. I was contesting before Yuri knew what a contest was.
>>
>>73
>>Chip n1IR
>>
>>
>
>heh, heh, heh
>BS, BS, BS and BS
>?,?, I did, I do, BS, Yea, right!
>Amazing what this Mï¿½RON "knows"!
>
>N1IR, Fractenna et al, has, in my personal opinion, a track record of abuse
>and
>troll like posts.
>Do not respond to this post. This person, in my personal opinion, is
>not worth the bandwidth.
>For those that have doubts, go to www.dejanews.com and do an advanced
>search with the following parameters:
>Forum: rec.radio.amateur.antenna
>Author: fractenna
>Keywords: "this thread is closed" 53 hits last count
> "lawsuit" 47 hits last count
> "death threat" 11 hits last count
>
>Yuri, ex OK3KGH
>
>PS - stop making fool of yourself, GROW UP!
>

U R CH1CKN!

BAWK!!!

73
de N1IR

3546. Re: Hitting a Record .. OOPS!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D26B04.3819311A@earthlink.net>
Source record: 179284

Granted, but 10 will get you 100 that inide of ten years Linux
development will have that OS in a very competitive position in relation
to Windows. Apple's to-be-released-any-moment OS X is built on Linux,
and in anticipation of that event Apple's stock and sales have already
jumped over 15%. If that trend continues, and there are a number of
reasons to expect that is will, and more and more developers jump on the
Linux bandwagon, we may finally be able to shake off the Windows chains
we have labored under (oh brother, is that an understatement!) in the
not so distant future. Still, we haven't heard back from Mr. Bill, who
may yet find some way to co-opt or buy out the Linux world! Captialism
works great, at least until a few people manage to acquire too much capital!

de Will KD7BFX

Brian Kelly wrote:
>
>
> That's the big problem with Linux at this point in it's development. I churn my
> daily bread via doing industrial machine design via a bunch of industry-standard
> high-end Windoze apps like CAD and FEA and many others of that ilk. No such
> things for Linux or the MAC O/S at the professional levels. Yet. I'll get into
> Linux on a casual basis, maybe run all my Internet activities on Linux but I
> can't get serious about it.
>
> Brian, w3rv

3547. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D26E6C.C49C656F@bigfoot.com>
Source record: 179285

John Burrell wrote:
> I have for some time now been considering upgrading my amateur license to
> Class A by taking the morse test (actually I've been intending to do this
> for nearly 20 years)

Actually, you must have been considering upgrading for *50* years. The
Class-A license hasn't existed since about 1950. :-)

> One system I saw recently on the SGC
> website while checking out their tuners was the SG-303 antenna, which
> combines a helically wound lower section with a whip on top.

I believe it has the whip running up through the center of the helical.
On a bang-for-bucks ratio, the SGC system is one of the worst choices
you can make. Take a look at my web page for results of actual 75m
mobile antenna measurements. Although the Bugcatchers and Screwdrivers
are best, sounds like the Hustler series might meet your requirements.
--
http://www.mindspring.com/~w6rca

3548. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000927180148.29694.00000362@ng-mf1.aol.com>
Source record: 179286

>
>I think it is a rather extreme interpretation to say that the QEX
>editorial policy on fractal antennas, if one does exist, is an attempt
>to prevent a new technology from reaching market.

I think that you have an obligation to report the person who said this to their
supervisor with a recommendation of termination.

And if I ever find the person who said that I will do so too!

Then again, my comment --which is totally unrelated to your statement, is
presented below.

73
Chip N1IR

<Such conspiracies are
>largely impossible to maintain, if the technology being supressed
>*really* offers the degree of improvement and benefit that is claimed
>for it, especially when design and construction info is so readily
>distributed via the internet, and in the case of fractal-shaped
>antennas, homebrewing presents no particular problems. However, it seems
>more reasonable to me that the editors of QEX are just being skeptical,
>as they should be of a newer idea. I do find fractal antenna theory
>intriguing, and hope the theory someday bears *full* fruit. having more
>hams experiment with fractal designs would certainly help to find out
>whether fractal antennas have a real permanent place in mainstream use,
>especially at HF.
>
>In the field of antennas in particular, there has been so much
>hucksterism and snake-oil sold over the years (can you say CFA?), that
>editors who wish to maintain the integrity of their publication might
>understandably be reluctant to publish any articles on the subject that
>aren't accompanied by *scrupulous* documentation and repeatable results.
>That is pretty much the standard of any scholarly and/or peer-reviewed
>journal, even if the audience is principly hobbyists. Perhaps the author
>of this promised fractal antenna article has satisified these prudent
>requirements, and thus they are willing to publish it. Take a look at a
>recent issue of "73" magazine if you have any doubts what can happen to
>a magazine that doesn't maintain reasonably rigorous standards in
>accepting and publishing technical articles.
>
>What issue will the fractal article appear in? I don't regularly buy
>QEX, but I'd like to at least sneak a peek at it at HRO when it comes out.
>
>de Will KD7BFX

>
>
>Fractenna wrote:
>>
>> In a major shift in its position, the ARRL has made a policy decision to
>run a
>> fractal antenna article in QEX (an ARRL publication), according to Doug
>Smith,
>> editor.
>>
>> In the past, the ARRL has called the submission of a fractal antenna MS "an
>> April Fool's joke" and has not published any fractal antenna articles in
>its
>> publications, since this original submission in February 1994.
>>
>> The author is known to many on this NG.
>>
>> I will be happy to publicly critique said article, just as I have in the
>past,
>> on the ham page web site reviewing other fractal antenna articles for
>hams.
>> This site gets over 4000--7000 different vsiitors, on average, a month.
>This is
>> approximately the same number of subscribers as found in QEX.
>>
>> There are some details to be worked out regarding intellectual property.
>Still,
>> it is important to realize that the ARRL has REVERSED its policy
>> decision--which effectively attempted to prevent this important new
>technology
>> from being accessed informationally by its members.
>>
>> Perhaps you may wish to let Doug know your feelings on this matter. His
>e-mail
>> is:
>>
>> dsmith@sedona.net
>>
>> It's good to see our League opening it's eyes to new technologies!
>>
>> 73!
>> Chip N1IR
>
>
>
>
>
>
>

3549. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D26C63.AFC836EE@bigfoot.com>
Source record: 179287

VE9SRB wrote:
> In looking at some of Cecil's other posts here
> and elsewhere, I have come to appreciate his humor and understand his method
> of engaging in a discussion better. Had I understood this better in the
> earlier discussion, I think I could have avoided fanning the flames from my
> end.

Flames from your end? Too much Mexican food?

> In a transmission line system with loss, a conjugate match can be
> established at any point in the system. However, establishing a conjugate
> match at any one point in a lossy system does not establish a conjugate
> match at every point in the system.

So there can exist a conjugate match from Point-A out to the antenna but not
from Point-A back to the transmitter? I suspect it can be proven that a
perfect conjugate match cannot exist in the real world any more than a
perfect yardstick can exist in the real world. After all, the conjugate
matching theorum assumes no resistance at all in those 4-terminal networks.

> A conjugate
> match can be established at the T-network output through component value
> adjustment but an impedance match will not exist at the T-network input.

But this may be akin to saying that the yardstick at the NBS is not exactly
a yard long. Exactly how far can a real world Conjugate Match deviate
from an ideal Conjugate Match and still be called a Conjugate Match. Are
we talking 0.000001% accuracy or 10% accuracy?
--
http://www.mindspring.com/~w6rca

3550. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000927180345.29694.00000363@ng-mf1.aol.com>
Source record: 179288

>Rick picked up on Yuri making the 3.5 trophy, but--he missed the report
>back in the back that also shows the BIG TIME, for Yuri.
>He is listed as the all-time record holder for North America, CW, on
>Topband,(1.8) which he set in '98.
>
>Bill-W4BSG
>
>

Unfortunately working DX contests on 80 or 160 does not require the same skill set as someone running a 10M contest.

I, personally, don't think Yuri has sufficient skills to beat me.

73
Chip N1IR

3551. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <f6rtq8.ttm.ln@mail.specsol.com>
Source record: 179289

Bill Aycock <baycock@hiwaay.net> wrote:
> Wow! THe fractanal group strikes again- has found how to use Yahoo to
> spam the world.

> Does anyone know the URL and who the transgressor is? Washington state?

> Bill-W4BSG

<rest snipped>

Well, this is just a guess, but...

Roy volunteered to put various antenna files on his web site.

Roy is in Washington.

You will notice there is no directly identifiable person or organization in
the "press release".

Jim Pennino

3552. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D273A5.AEB984A7@eznec.com>
Source record: 179290

I'm in Oregon, and I could care less about the huffing and puffing. It's
just another childish troll.

Roy Lewallen, W7EL

Jim Pennino wrote:
>
> Bill Aycock <baycock@hiwaay.net> wrote:
> > Wow! THe fractanal group strikes again- has found how to use Yahoo to
> > spam the world.
>
> > Does anyone know the URL and who the transgressor is? Washington state?
>
> > Bill-W4BSG
>
> <rest snipped>
>
> Well, this is just a guess, but...
>
> Roy volunteered to put various antenna files on his web site.
>
> Roy is in Washington.
>
> You will notice there is no directly identifiable person or organization in
> the "press release".
>
> Jim Pennino

3553. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39f1701e.454883047@news.seanet.com>
Source record: 179291
Body handling: HTML body converted to readable text

On 27 Sep 2000 22:30:45 +0200, refertofriend@reply.yahoo.com (Yahoo!
Finance) wrote:

>Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio
Ham
>
BOSTON--(BUSINESS WIRE)--Aug. 14, 2000--Fractal Antenna Systems,
>Inc., has sent notification to a radio amateur to cease and desist in
>the public dissemination of a fractal antenna web page which falsely
>mirrors it's recently posted addition.
>
The company holds a proprietary IP position, including several
>pending patents, on fractal-element antenna (FEA) and related
>technology. FEA have been shown to have distinct advantages in
>virtually all areas of antenna applications, especially in the
>wireless, broadband, and telecommunications arenas.
>
Nathan Cohen, Ph.D., CTO and Chair of the company explained the
>concern over the violation: ``Recently, Fractal Antenna Systems, Inc.
>graciously added a new addition to its web site, so that radio
>amateurs can benefit and learn from the `disruptive' antenna
>technology afforded from fractals. Unfortunately, a radio amateur in
>Washington State decided to extract the copyright material and
>produced his own direct and derivative version, without authorization.
>No permission request was made, and the material posts inaccurate
>statements which make the technology appear to do exactly the opposite
>of what it accomplishes. Further, he publicly and globally announced
>his unauthorized site over USENET, with deleterious effect to the
>original site, and wide spread distribution.''
>
Cohen added: ``We have grave concerns that such a malicious effort
>undermines the good rapport that the company has with the global radio
>amateur community, many millions strong, and also with its customer
>base. Such a malicious effort is further being made at a time when the
>company's first patent has received a notice of allowance, and thus
>imminent issuance. The bogus site makes no mention of the nature of
>this and other pending patents with respect to the antenna, thus
>misleading the reader to consider that the technology is within the
>public domain, which it is not.''
>
Cohen notes that the company has allowed radio amateurs permission
>to build and experiment with the posted antenna design. The radio

>amateur in violation has neither built nor tested the design, but made
>inaccurate and misleading statements which do not support the measured
>or modeled results.
>
``We strongly support the excitement and learning which our new
>technology engenders--with hams, students, hobbyists, and others.
>However, malicious and illegal efforts to present and misrepresent
>such will lead to legal proceedings as necessary. We continue to
>invite radio amateurs and others to view and experiment with fractal
>antennas for private, non-commercial use without sale, and will
>continue to post new material of interest in non-commercial contexts.
>However, unauthorized use of copyright material; failure to attribute
>IP, and so on, are deleterious to the efforts of the firm and cannot
>be allowed'', stated Cohen.
>
Cohen finally added that additional web site holders will be
>informed of any copyright violations and failure to attribute the
>technology and its pending patent status.
>
Fractal Antenna Systems, Inc. is a privately held Florida
>corporation, with its principle base at Telecom City in Massachusetts.

Hi All,

Wow!

Looks like I'm going to Disneyland!

I would consult an attorney in regards to this slander and defamation, but then I would miss the joke. To paraphrase Andy Warhol: "everyone will be infamous on the internet for 15 microseconds."

Instead I will bide a while until such time as Fragile Antenna's assets are well established and can afford me a comfortable, early retirement - but that's the Joke! Assets? This is dreaming in technicolor and surround sound.

This announcement at Yahoo alone is enough to plunge the stock of any company down the toilet. Gad, it sounds so desperate and pleading. But this approach is very nearly the same as I've pointed out elsewhere, it seems the best line of defense is to damn your own design (company) to put a pox on the replica (reviewer).

For those who are curious about the genesis of this, they may visit my page at:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
or perform a search of DejaNews with the term "k2" or "Flying H."

Here you can observe how these designs pour power into the ground to optimize a successful launch angle at 10 degrees with -4.7dBi (+/- 3 dB). And the good news is that this is the best gain you will obtain! The price is a little stiff though - variations of several inches in elevation can drive the SWR through the roof. Want to experience the

thrill of these without building them? A handful of mud in each ear would come to a close approximation at those other angles (it also helps with F/B so that those annoying back seat drivers or noisy patrons at the movies don't upset you).

So now, where's all the bleeding heart types who offer that redemption of the savage is a noble prospect? I won't count on you fellows for my defense fund, but I will save a spot at the gallows for you (bring your dancing shoes). ;->

73's
Richard Clark, KB7QHC the worlds' most bestest fractal designer of all time, & reviewer to the stars of mythically superb radiators

p.s.
a tip of the hat to the anonymous poster for this superb piece of comedy.
rwc

3554. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39ef6ecd.454546513@news.seanet.com>
Source record: 179292

On Wed, 27 Sep 2000 15:43:25 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:

>Wow! THe fractanal group strikes again- has found how to use Yahoo to
>spam the world.
>
>Does anyone know the URL and who the transgressor is? Washington state?
>
>Bill-W4BSG

Hi Bill,

Maybe its DekeWhy!

73's
Richard Clark, KB7QHC (Seattle Washington)

3555. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rclark@epicedge.com
Message-ID: <39f06f4b.454672804@news.seanet.com>
Source record: 179293
Body handling: HTML body converted to readable text

On Wed, 27 Sep 2000 14:18:16 -0700, Jim Pennino
wrote:

>Yahoo! Finance wrote:
>
>> Dr. Nathan Cohen, PhD (fractenna@aol.com) has sent you a news article
>
>
>
>So now the twit is posting html to a newsgroup...
>
>I had to read this three times to figure out what the hell he's complaining
>about; usual Chip marginal English construction.
>
>Looks to me like the first real harrassment law suit born of this newsgroup
>is going to be filed by someone other than the "scientwist".
>
>Jim Pennino

Hi Jim,

I tell you guys over and over again and you never listen.

Perhaps that fellow who will pursue the suit will be DekeWhy!

73's
Richard Clark, KB7QHC (Seattle Washington)

3556. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000927183311.24678.00001127@ng-cu1.aol.com>
Source record: 179294

>From: Will gwelfster@earthlink.net

>Indeed, AEA is out of business, and the Isoloop is no longer available.
>MFJ does make a similar small transmitting loop, but at nearly $400 for
>the 40-15 version, it is pricey.

I have seen the MFJ unit close up and I do not believe that it is overpriced. The critical part of the loop's performance is the capacitor and their's has large plates welded to the loop. They have also made continual improvements to the control unit. The Lab kept the Product Review unit, and it has been banging around and loaned to different HQ staff without incident for years.

>I have homebrewed two magnetic loops, and while their performance is
>quite remarkable relative to their size, they present several fairly
>severe compromises that anyone with adequate space need not accept.

The published efficiency spec for the AEA unit was, if memory serves, 78% on 20 meters. I ran an EZNEC model and made some assumptions about capacitor Q and believe this to be the case. As a small antenna, it lacks the extra dB or so of "gain" that one gets with a half-wave dipole, but I am not sure that, if properly built for low loss, the compromises are all that severe. The main compromise is that it has to be tuned for relatively small frequency excursions.

> their efficiency on 40 and 30 is low, on the order of 12-15%,

That sounds lower than I recall for the 30 meter model I ran; I think I was seeing about 40% or so. On 40 meters, it will be lower, but the efficiency of a loaded 8-foot whip is in the range of 10-15% on 40 meters, too.

> and you are restricted to an absolute maximum of 150W in transmitting

A real limit, but one that encompasses the vast majority of HF rigs. Those who have the limited space requirements are not apt to want to run any more than 100 W anyway, for RFI reasons.

> MFJ does not publish much info on this subject, but I found my clone to clip
> SSB signals on both TX and RX, as would be expected

I can just barely imagine this to be possible on 40 meters, but even then, I have to wonder how the Q could be that high. If the antenna is touted to be inefficient, the Q is not high.

>10 KHz, which was essentially a homebrew clone of the MFJ (using a
>homebrew "trombone-style" variable capacitor with a 40 mil PTFE
>dielectric, instead of the butterfly air vairable MFJ uses,

I have to ask whether this will have nearly as high a Q as an air-variable with plates welded to the radiating loop? On 40 meters, any degradation in the Q of the capacitor will make a big difference in the loop performance.

73,
Ed Hare, W1RFI

3557. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D27414.E6BF38E9@earthlink.net>
Source record: 179295

After 11 years here, I am leaving Arizona on Friday morning. Why? Ultimately because life here has degraded badly, and nobody is a citizen anymore, everyone is just a "taxpayer." Everything here is justified or ruled out here on the basis of what "taxpayers" want, rather than what is good or fair public policy.

Arizona is dead last of 50 states in school funding (the "Sun City" voting bloc has seen to that, having *never* come in above 10% in favor of *any* funding increases or other improvements to education or child healthcare; why should they? They already raised *their* kids elsewhere, thank you), child poverty, urban environmental quality, domestic violence, gerrymandering, safety licensure [locksmiths, asbestos removal companies, certain health care providers need no screening or licensure], proper zoning and development regulation [leapfrogging so much that it takes 30 minutes for emergency response to the newer, farther out subdivisons, taxing already strained police/fire/EMS resources], workplace safety, and urban traffic safety [worst traffic fatality rate bar none]; it is first in the nation in terms of accidental gun deaths of minors, tuberculosis (ironic, huh?), failing schools [AIMS test? talk about your "unfunded mandates"!], juvenile health (only one of 4 states to have a measles epidemic post-1960, as recently as 1988), red light runners, average miles-per-day commute, is under [by 5-to-1 over the nearest runner-up] the most court orders of *any* state to reform and improve schools, jails, hospitals, streets & highways, mines, use of public lands, and awarding of government contracts, and the legislature is the biggest collection of kooks and unreconstructed niggling rabble rousers and paranoiacs of anywhere I can think of outside of Louisiana. On top of that, it is just to damn hot, and every 10K new red-tile roofed houses they put in raises the average annualized temperature by almost a quarter of a segree fahrenheit, and the relative humidity by over half a percent (pools lawns). I shudder to think of the quality of the lives of people living hear in 20 years on less that $150K/year!

The AZ State House wanted to secede from the Union a couple of years ago, over a threat by the Feds to withhold highway funding because the state was defying court orders and the rules every other state has to follow, to reduce air pollution. Secede? I say Arizona ought to be expelled from the Union! Arizona seems to want to be its own country, so be it! Let the laughing stock of the nation fend for itself. For god's sake, if you value your quality of life and your health and safety, *DO NOT* even consider moving hear, unless you are A) retired, B) rich, and C)choose a remote rural part of the state, out of reach of the moron-cabal of Maricopa-Pima county and the State Guvmint.

de Will KD7BFX

Wes Stewart wrote:

>
> You are eminently qualified, I'm sure fair-minded and what-the-hey, speaking as
> an Arizona taxpayer, I won't mind if you do it on "company time" <g>.
>

3558. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d27622.47772952@news.akorn.net>
Source record: 179296

On 27 Sep 2000 22:03:45 GMT, fractenna@aol.com (Fractenna) wrote:

>>Rick picked up on Yuri making the 3.5 trophy, but--he missed the report
>>back in the back that also shows the BIG TIME, for Yuri.
>>He is listed as the all-time record holder for North America, CW, on
>>Topband,(1.8) which he set in '98.
>>
>>Bill-W4BSG
>>
>>
>
>Unfortunately working DX contests on 80 or 160 does not require the same skill
>set as someone running a 10M contest.
>
>I, personally, don't think Yuri has sufficient skills to beat me.
>
>73
>Chip N1IR

Nice troll!

3559. Re: taking advantage of eaves troughing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D2748F.EA11F1FB@earthlink.net>
Source record: 179297

here's another idea: how about laying insulated wires, cut to proper
lengths, in the gutters? That way to expand your radial system while
minimizing any aesthetic probelms.

de Will KD7BFX

W1RFI wrote:
>
> >From: "Wayne Jones" wrjones1@home.com
>
> >I have eaves troughing all around the roof of my 2 story house. Is there any
> >way all that metal can be put to good use when constructing a vertical for
> >20m on top of the roof? For example, is there any advantage in attaching the
> >eavestrough to the radials?
>
> I recommend that you NOT do this. The various sections of the gutter (the New
> England word for an eavestrough) may not be well bonded to each other and may
> have some corrosion present. Both can result in arcing and sparking (a
> potential fire hazard, especially if the gutter is filled with dry leaves) or
> the generation of noise or harmonics. You may be able to get away with it at
> low power, but if you are going to try it, make sure the various sections are
> well bonded together. It may be easier to run a lot of wire around to make a
> radial system.
>
> Some of my considerations apply if the antenna system (including radials) is
> located close to the gutter; induced currents can be rather strong in some
> cases.
>
> 73,
> Ed Hare, W1RFI

3560. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000927183902.24678.00001128@ng-cu1.aol.com>
Source record: 179298

>From: Roy Lewallen w7el@eznec.com

>Yes, you can look at an antenna with more than 20 segments, including
>the ones I posted, with the EZNEC demo View Antenna display. You just
>can't do any calculations.

To those that have the demo version, I will add that, IMHO, the "full" version, DOS or Windows, is well worth the asking price. That 20-seg limitation will get you every time. In using NEC, and then EZNEC, to play with all sorts of antennas on the computer screen, I have learned things about antennas that are NOT found in the text books. At least spring for the DOS version; you will NOT be disappointed!

73,
Ed Hare, W1RFI

3561. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000927184013.24678.00001129@ng-cu1.aol.com>
Source record: 179299

>From: arrow146@aol.com (Arrow146)

>Although I really could not hear any of the stations he was talking
>to. Guess my antenna is just not good enough to receive stations from
>Europe.

>73 Al Lowe N0IMW

If you are located in zero zone, I mean 0 land, it is quite possible that the band was open to New England but not to the midwest.

73,
Ed Hare, W1RFI

3562. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39D278E7.95EFEEF3@uci.edu>
Source record: 179300

Fractenna wrote:

> >In your last sentence you seem to be implying that Steve is lying about
> >having already made a request to join the list. A status "pending" message
> >would seem to verify the fact that he had asked to be allowed to join.
> >Steve seems to be a genuine, honest, and sincere person. What is the matter
> >with you? What do you enjoy about making enemies of everyone on this
> >newsgroup?
> >
> >de ac6xg

> I received no such request. I already told you this.

> And what is stopping you from trying?

I haven't requested to be added to the list because I don't trust you.

ac6xg

3563. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D27AA5.E4512D1A@mwci.net>
Source record: 179301

VE9SRB wrote:

> Assume the load at the tuner output is 150 + j50 ohms. Now design your own
> lossy T-network circuit (pick some reasonably low Q's) to achieve a 50 ohm
> matched input impedance at the T-network input. Next, use the method
> described by Walt to determine the T-network output impedance. It should
> calculate the output impedance to be 150 - j50 ohms. Next, adjust the
> component values (keeping Q constant) to change the input impedance to any
> other purely resistive value. An impedance match will no longer exist but
> now calculate the T-network output impedance using Walt's methods.

The thing that is consistently (conveniently) ignored is that even if the tuner is completely lossless, a conjugate match at the output of the tuner cannot be achieved *unless* conjugate match at the output of the PA is also achieved. In other words (in the above example), unless the output impedance of the PA is 50 ohms pure resistance. The validity of even a "theoretical" conjugate match in the system is based on this crucial premise.

That 50 ohms output resistance is achieved in certain carefully rigged experiments, or if the PA is designed specifically to have a 50 ohm output resistance, for example by the use of negative feedback. In 95% or more of PA's used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there is no assurance of this whatsoever in vac tube or xistor PAs.

I suppose there are cases where conjugate match is important. But as a bare minimum you had better be damned sure the PA output Z is 50 + j0 ohms. And that does not happen by decree or wishful thinking.

I have seen all of the stultifying, mind-numbing rhetoric that tries to convince me that the output Z is, in fact, "assured" to be 50 ohms resistive. It is junk science.

Bill W0IYH

3564. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D278FA.10F43B4B@bigfoot.com>
Source record: 179302

Wes Stewart wrote:
> I don't claim the intellectual capability to get in the middle of a discussion
> with the likes of Walt, Steve, Kevin, et al.

Just means that you don't subscribe to flaunting it if you have it. :-)
(Also doesn't imply that anybody listed above flaunts it either).

> When lossy components are used, there is--no surprise--loss in the network and
> the view looking back into the output of the network no longer is the conjugate
> of the load Z.

That's no surprise, Wes, but is it close enough? Exactly how much of a
deviation from perfection can be tolerated? If it is within 0.00001%
of a conjugate match, is that good enough? What about 1%, 5%, 10%?
--
http://www.mindspring.com/~w6rca

3565. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D276FB.2CE8132A@bigfoot.com>
Source record: 179303

Will wrote:
> While a horizontal loop, being omnidirectional, will by definition have
> less gain in the direction of the main lobes of a dipole, if the loop is
> mounted in the vertical plane, the pattern should be nearly the same as
> the dipole, and exhibit 2-4 dB gain over the dipole.

I don't think that's so, Will. Most of the single vertical loops
that I have modeled showed slightly less gain and slightly wider
beamwidths than dipoles for the same maximum height.
--
http://www.mindspring.com/~w6rca

3566. Tower installation publications? Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <39D27C58.6F71A792@earthlink.net>
Source record: 179304

First of all, I would like to apologize for off-topic posting on this ng which clearly deals exclusively with something called "fractal" antennas. I personally don't have nearly enough expertise to get involved in the discussions about lawsuits, death threats, name calling and other fractal stuff, so until the time I grow up, I'll refrain from posting again.

However, I do need some help which is tower-related (and as such, having nothing to do with antennas, fractal and nonfractal, whatsoever). This winter I'll be installing my first tower ever, and I'm looking for any publication that deal with the issue. Namely, guying, grounding, tips and tricks, and so on... And yes, yes, I do know about the tower-talk reflector, but I don't feel like subscribing to e-mail discussion groups. So - does anyone know if there is a book, brochure, website, anything out there dealing with tower installations? I did not find jackshi... I mean, anything, in the QST and CQ bookstores.

Thanks and 73

Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

3567. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000927185918.17687.00001081@ng-fe1.aol.com>
Source record: 179305

>The vehicle is
>a Toyota 4-Runner so there would be a reasonable ground plane for a roof
>mounted antenna, at least in comparison with most modern European cars.

The SUVs suck! I tried to put beefed up Hustler on the trailer hitch on GMC Yukon Denali and performance went down considerably as compared to my "radiomobile" - 72 Buick LeSabre where the antenna is mounted on the fender and that old beauty is one mother of a ground plane.
The best think would be to put something on the roof (if it is metal), but then you are limited with height and is clumsy to take it down (quick disconnect). Hustler with "splitter" and three resonators would work very well. SGC is the worst system with tuner at the base.

Yuri K3BU/m

3568. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D27C73.87BD4B2D@bigfoot.com>
Source record: 179306

"William E. Sabin" wrote:
> That 50 ohms output resistance is achieved in certain carefully rigged
> experiments, or if the PA is designed specifically to have a 50 ohm output
> resistance, for example by the use of negative feedback. In 95% or more of PA's
> used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there is no
> assurance of this whatsoever in vac tube or xistor PAs.

There is one train of thought that a conjugate match is achieved
almost automatically by the combination of Rs and the non-dissipative
load line inside the amplifier. In other words, the source impedance
includes both the non-dissipative load line and the dissipative losses.
Thus an amplifier can have an efficiency greater than 50% while
maintaining a conjugate match, just as an antenna can have an
efficiency greater than 50% when conjugately matched.
--
http://www.mindspring.com/~w6rca

3569. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <20000927191408.27577.00001280@ng-fm1.aol.com>
Source record: 179307

>If you are located in zero zone, I mean 0 land, it is quite possible that
>the
>band was open to New England but not to the midwest.
>
>73,
>Ed Hare, W1RFI

I am just 7 miles from 0 land in 7 land.
(Cheyenne WY)

The band was open to New England just not to Europe.

73 Al Lowe N0IMW

3570. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: John Pinckney <longleaf@pop.erols.com>
Message-ID: <39D27D2B.EBBAB261@pop.erols.com>
Source record: 179308

Ken,

I'm in a similiar situation. I've had some luck with back-to-back Hamsticks for 20 on my deck. And, I have have a helical going three stories, up a tree in my backyard.

GL/73

John

Firestone wrote:

> I would like to appeal to the joint wisdom of this newsgroup to help
> me solve a problem.
>
> I live in a townhouse with the usual cc&r crap, so I am trying to put
> up the best antenna I can.
>
> The townhouse is 3 stories, levels, with the first (ground) level as a
> "basement." It has aluminum siding on the back, a rear deck on the
> second level, about 8 or 9 feet above the ground, and a minimal crawl
> space for an attic. My shack is on the third level, in the rear, but
> could be moved to the first level rear.
>
> So far I have had the most sucess with a random wire from the shack
> window to the deck rail (wood), along the rail, and then to a wood
> fence at the end of the property, total length approx 35-36 feet.
>
> Unfortunately, this setup is noticed by my next door neighbor, and I
> have to put it up, take it down, etc which will be a pain in the
> winter.
>
> Other things I have tried are hamsticks out the window with a single
> counterpoise wire, a dipole in the shack room for 15 meters, and an
> Isotron antenna on 15 meters. None of these has worked very well, and
> the 8 foot hamstick is a bit of a job to maneuver in a small room.
>
> I was wondering about putting antennas under the deck, random,
> shortened dipole, or loop, or any other ideas. The lowest band I want
> to work is 40 meters, and I am trying to do this at qrp
> levels. Moving, increasing power, and staying on vhf and above are not
> acceptable answers.
>
> --
>
> ==========

> Ken Firestone, W3CAT | For every problem there is one solution
> ken@firestone.net | which is simple, neat, and wrong.
> kenf@clark.net | -- H. L. Mencken
> ==========

3571. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39f57f50.458773140@news.seanet.com>
Source record: 179309

On Wed, 27 Sep 2000 16:53:39 -0500, CAM <cam2338@bigfoot.com> wrote:

>
>But this may be akin to saying that the yardstick at the NBS is not exactly
>a yard long. Exactly how far can a real world Conjugate Match deviate
>from an ideal Conjugate Match and still be called a Conjugate Match. Are
>we talking 0.000001% accuracy or 10% accuracy?
>--
>http://www.mindspring.com/~w6rca

Hi Cecil,

The yardstick is in Paris. And it isn't a yard long (unless we're
talking about about 10% accuracy).

73's
Richard Clark, KB7QHC

3572. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D27FB5.4D521912@bigfoot.com>
Source record: 179310

Richard Clark wrote:
> The yardstick is in Paris. And it isn't a yard long (unless we're
> talking about about 10% accuracy).

So you're a yardstick expert - how about conjugate matches? :-)
--
http://www.mindspring.com/~w6rca

3573. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39f68118.459229967@news.seanet.com>
Source record: 179311

On Wed, 27 Sep 2000 17:47:22 -0500, CAM <cam2338@bigfoot.com> wrote:

>> When lossy components are used, there is--no surprise--loss in the network and
>> the view looking back into the output of the network no longer is the conjugate
>> of the load Z.
>
>That's no surprise, Wes, but is it close enough? Exactly how much of a
>deviation from perfection can be tolerated? If it is within 0.00001%
>of a conjugate match, is that good enough? What about 1%, 5%, 10%?

Hi Cecil,

Accuracy has no part in the discussion really. Rather it is a
question of definition (and dontcherdare pull out that IEEE
dictionary!), or even the proper assignment of variables.

The measure of RF Power by amateurs cannot be said to be any more
accurate than 20% without a considerable investment in equipment,
training, and NIST certification. Basically much the same could be
said of amateur editing.

73's
Richard Clark, KB7QHC

3574. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D282CC.BD9D6B25@bigfoot.com>
Source record: 179312

Richard Clark wrote:
>
> CAM <cam2338@bigfoot.com> wrote:
> >That's no surprise, Wes, but is it close enough? Exactly how much of a
> >deviation from perfection can be tolerated? If it is within 0.00001%
> >of a conjugate match, is that good enough? What about 1%, 5%, 10%?
>
> Accuracy has no part in the discussion really.

So the argument has nothing to do with reality, huh? No matter
how close to a perfect conjugate match you are, you can never
prove it has been achieved. After all, proving a conjugate match
depends upon measurements with built in inaccuracies.
--
http://www.mindspring.com/~w6rca

3575. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39f782b2.459639957@news.seanet.com>
Source record: 179313

On Wed, 27 Sep 2000 17:54:29 -0500, "William E. Sabin"
<sabinw@mwci.net> wrote:

>
>The thing that is consistently (conveniently) ignored is that even if the tuner
>is completely lossless, a conjugate match at the output of the tuner cannot be
>achieved *unless* conjugate match at the output of the PA is also achieved. In
>other words (in the above example), unless the output impedance of the PA is 50
>ohms pure resistance. The validity of even a "theoretical" conjugate match in
>the system is based on this crucial premise.

Hi All,

This above is a rather strained definition for Conjugate. Conjugation
is simply the complex, inverse value of the load with respect to the
source (or vice-versa). The presumption of a 50 Ohm requirement is an
artificial constraint in anticipation of arguments that might follow,
illustrating a typical (blackboard) case. There are no typically 50
Ohm antennas and as such nearly any antenna is compounded with
reactance to achieve this value or other Resistive value is allowed to
accumulate SWR as it is deemed inconsequential (the 37 Ohm perfect
Monopole or the 73 Ohm perfect Dipole). Of course either of these may
manifest 50 Ohms raw to the system, but that is a consequence of
proximity to ground and confounds the statement above.

73's
Richard Clark, KB7QHC

3576. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39f88563.460328787@news.seanet.com>
Source record: 179314

On 27 Sep 2000 23:14:08 GMT, arrow146@aol.com (Arrow146) wrote:

>>If you are located in zero zone, I mean 0 land, it is quite possible that
>>the
>>band was open to New England but not to the midwest.
>>
>>73,
>>Ed Hare, W1RFI
>
>I am just 7 miles from 0 land in 7 land.
>(Cheyenne WY)
>
>The band was open to New England just not to Europe.
>
>73 Al Lowe N0IMW

Hi Al,

Bummer on two counts :-(

73's
Richard Clark, KB7QHC

3577. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000927195143.19879.00000926@ng-mf1.aol.com>
Source record: 179315

Geez Chip, don't do that while I'm drinking coffee--right up the nose!

Rick K1BQT

3578. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000927195154.08976.00000710@ng-ff1.aol.com>
Source record: 179316

>I haven't requested to be added to the list because I don't trust you.
>
>ac6xg

I don't care.

N1IR

3579. FS: 2 element 5 band quad antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: Bob Williams <n7int@worldnet.att.net>
Message-ID: <39D2871F.6189C7A@worldnet.att.net>
Source record: 179317
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.ham-radio.swap

FOR SALE: Lightning Bolt 2-element, 5 band (10-20m)quad antenna. As new, still in original boxes, never installed. No room for it at my present QTH now or for the next couple of years. $250 and you pay shipping from 97113..73, Bob

3580. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <VNvA5.2252$fx6.130810@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179318

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39D27AA5.E4512D1A@mwci.net...
>
>
> VE9SRB wrote:
>
> > Assume the load at the tuner output is 150 + j50 ohms. Now design your
own
> > lossy T-network circuit (pick some reasonably low Q's) to achieve a 50
ohm
> > matched input impedance at the T-network input. Next, use the method
> > described by Walt to determine the T-network output impedance. It
should
> > calculate the output impedance to be 150 - j50 ohms. Next, adjust the
> > component values (keeping Q constant) to change the input impedance to
any
> > other purely resistive value. An impedance match will no longer exist
but
> > now calculate the T-network output impedance using Walt's methods.
>
> The thing that is consistently (conveniently) ignored is that even if the
tuner
> is completely lossless, a conjugate match at the output of the tuner
cannot be
> achieved *unless* conjugate match at the output of the PA is also
achieved. In
> other words (in the above example), unless the output impedance of the PA
is 50
> ohms pure resistance. The validity of even a "theoretical" conjugate match
in
> the system is based on this crucial premise.

Bill:

This is all absolutely correct.

>
> That 50 ohms output resistance is achieved in certain carefully rigged
> experiments, or if the PA is designed specifically to have a 50 ohm output
> resistance, for example by the use of negative feedback. In 95% or more of
PA's
> used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there
is no
> assurance of this whatsoever in vac tube or xistor PAs.
>

> I suppose there are cases where conjugate match is important. But as a
bare
> minimum you had better be damned sure the PA output Z is 50 + j0 ohms.
And that
> does not happen by decree or wishful thinking.
>

This is all absolutely correct.

> I have seen all of the stultifying, mind-numbing rhetoric that tries to
convince
> me that the output Z is, in fact, "assured" to be 50 ohms resistive. It
is junk
> science.
>
> Bill W0IYH
>
>
>

The issue of the existence of a conjugate match is of secondary interest to me in these wave reflection discussions. In discussing it, I try to emphasis the points you make above. Of primary concern to me in these discussions (not that any of it really matters) is the concepts related to how the impedance match is achieved as a function of wave reflections within the transmission line system, how rearward traveling power is delivered back into a tuner or transmitter's output stages (assuming no tuning circuit), and how voltages and power combine in the steady state. Clearly it is an academic discussion but some are interested in the topic so why not discuss it? Learning is always beneficial.

Take care.

Steve VE9SRB

3581. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 11:28:55 UTC
From: william ewald <wgewald@att.net>
Message-ID: <29m3ts804v2tfcce5fd20qor4og5dames1@4ax.com>
Source record: 179249

On 26 Sep 2000 22:38:27 GMT, atkes@imap1.asu.edu wrote:

> I confess that I have not read either
>article; I figured I understood network theory already.

Reading the original articles would be important to the point you
are trying to make about "poor editing", don't you think?

3582. ��HAM�□u�@

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 17:29:01 UTC
From: vr2ydx <vr2ydx@i-cable.com>
Message-ID: <8qtauf$go94@rain.i-cable.com>
Source record: 179250

HAM��VR2XCI

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G144.780MHz & VR2KP
73 de VR2YDX

3583. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-27 23:19:35 UTC
From: M5WJF <mickey@mouse.com>
Message-ID: <39d28034@news.server.worldonline.co.uk>
Source record: 179251

Have you considered an FT-100 + ATAS-100 combination?

You could get around the 'advertising' by removing the antenna and fitting a blanking cover when leaving the car. Which you'd probably want to consider anyway as the ATAS-100 costs £250.

Using this antenna also means a tuner is not required.

I'm awaiting delivery of an ATAS-100, so can't at this moment give you an indication of it's performance, but the documentation mentions that you can manually tune the antenna to bands not covered in it's specifications by using the controls on the radio.

Both the FT-100 and FT-847 are compatible with this antenna.

Have fun, de M5WJF

"John Burrell" <john@tg8ozh.com> wrote in message
news:lZsA5.5687$qi7.535243@nnrp4.clara.net...
> Gentlemen,
>
> Your learned opinions are requested on the following subject:
>
> I have for some time now been considering upgrading my amateur license to
> Class A by taking the morse test (actually I've been intending to do this
> for nearly 20 years) and in anticipation of the change I have been looking
> at various mobile h.f. antenna systems. I have been reading this
newsgroup's
> offerings for the last few weeks and I'm sure there is sufficient
expertise
> here to assist with my problem, always assuming there is time after the
> mandatory trolling sessions!
>
> I rather like the 'screwdriver' approach but those I have seen are quite
> bulky and I would rather have something a little less obvious. The various
> other solutions with nice efficient loading coils are also highly visible
> and I think would draw attention to the fact that the vehicle has
something
> unusual on board. Our UK scum are only too willing to investigate anything
> likely to bring them the price of the next fix and having lost equipment
in
> the past I am reluctant to do too much advertising to them.
>
> I understand the problem in obtaining efficient radiation from any form of
> reduced size antenna and to then ask for further size reductions does seem
a

> little ambitious but who knows..... One system I saw recently on the SGC
> website while checking out their tuners was the SG-303 antenna, which
> combines a helically wound lower section with a whip on top. Naturally SGC
> seem to think this is the ultimate answer to wideband h.f. mobile
operation
> when used with a suitable tuner but has anyone on the NG tried one? The
> visual impact of the antenna is less than most amateur multiband systems
and
> would seem to be the way to go, although hanging the tuner on the side of
> the vehicle in a webbing harness is not quite what I had in mind!
>
> When I decide on the best compromise I'll probably build rather than buy
but
> the starting point for this 'quest for the holy grail' is a tad elusive.
My
> present intentions would be to try for 40, 20, and 15 metres. The vehicle
is
> a Toyota 4-Runner so there would be a reasonable ground plane for a roof
> mounted antenna, at least in comparison with most modern European cars. I
> have an Icom 706 which is currently used for 6 metres so users of Icom
> autotuners may have good input also.
>
> Sorry to waffle on but if you have any useful information or experiences I
> would be very pleased to read about them.
>
> If you made it this far thanks for your patience and 73, John G8OZH
>
>

3584. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: scott_evans50@hotmail.com
Message-ID: <8r0iqj$u2t$1@nnrp1.deja.com>
Source record: 179069

In article <39D2E773.7B71@wt.net>,
nm5k@wt.net wrote:
> Wayne Jones wrote:
> >
> > I want to put up a budget 30 foot 20m dipole suspended by 2 masts.
One will
> > be against my house and the other will be close to and guyed from
the corner
> > of my back fence.
> > I am planning on using 3 10foot sections of electrical conduit,
each section
> > smaller than the next so the sections will telescope and can be
clamped with
> > about a foot of overlap. I think the sizes I saw at Home Depot were
1 1/4,
> > 1, and 3/4 inches diam
> >
> > Does anyone know if the conduit is strong enough and how much
guying is
> > needed for a 30 foot mast?
> > Also how would I secure the base of the mast taking into
consideration that
> > there will be frost down to 4 feet below ground in winter.
> >
> > I also saw post where someone suggested stripping electrical house
wire to
> > use for the antenna wire. I assume he meant stripping the outer
casing
> > containing the coated wires and not the insulation on the
individual wires.
> > Do you think this wire is strong enough to hang 30ft without
stretching or
> > breaking? Does anyone have any info or opinions on this?
> >
> > tnx
> > Wayne Jones
> > ve3gqx
>
> Conduit is pretty flimsy. I'd rather use the fence top rail sections
> they sell for chain link fences. The only problem is you can
telescope.
> But they are swaged at the end to be able to hook together. I have 20
ft
> worth supporting a 10m vertical right now. 20 ft is real easy to put

up,
> but 30 ft is hard for one person. You would need a helper to help pull
> it up with a guy wire, while one holds the end. But I think could be
> done. Myself, if I had one 30 ft support for a 20 dipole, I wouldn't
> even bother with the 2nd mast. I'd just tie the leg off to the fence
> with a leader. But you'd have to go inverted v . Would work fine. If
you
> had 30 ft worth, and had the bottom 10 ft section clamped to the
house,
> I think you could get by with only one set of guys about 10 ft below
the
> feedpoint. The dipole would act as a bit of top guying. But actually,
I
> prefer push up masts. But they cost a bit more than fence rails. But
> much easier to work with. Radio shack sells them as well as many TV
> places. electrotex, etc. As far as the wire, I wouldn't go to the
> trouble of stripping romex unless you had a load free. Lotta work. But
> then again you only need 32 ft worth. I buy regular house wire at home
> depot in 500 ft spools. The insulation is on the wire, which I prefer
in
> general. Keeps it from corroding. I use #12 or #14 gauge. #14 is
plenty
> strong for what you want to do. I have #12 gauge on my set of dipoles.
> It's so strong it will pull the mast over before the wire broke. It
did
> that once when a teee limb fell on a ant leg. I'd use #14 gauge for
> yours to keep the weight down. MK
> --
> http://web.wt.net/~nm5k

I put up an 80 meter loop skywire using 4 30 ft top rail poles that
worked out very well. I started by pounding four steel fence posts into
the ground at the proper points. I then put two clamps at each fence
post so they would be handy at the time the poles were walked up into
the vertical posision. The poles were made ready with guy rope and
stakes pounded for use with the ground end of the guy ropes. Also
pulleys were installed at the tops of the poles and rope attached. The
poles were then walked up and clamped to the fence posts when vertical.
You will need a calm day to do this alone. After the poles are clamped
to the fence post you may then guy the pole to the ground stakes. After
all the poles are up and guyed down it's easy to pull up the antenna
wire.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3585. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <MSPA5.6744$qi7.639945@nnrp4.clara.net>
Source record: 179070

Hi CAM,

Thanks for your input but I'm sure I was older than 3 when I was first licensed ;)
> Actually, you must have been considering upgrading for *50* years
Here in UK we do still have Class A = any amateur band operation (and I'm sure you know that really) whereas my license is Class B = above 30Mhz. Just the Morse test to pass.
I think it was 1963 when the Class B was first made available, prior to that the only option was to pass the exam and the Morse test before being granted the ticket. I sometimes think that system was better, at least there was no chance to become an amateur operator and 'do the Morse someday soon....'
We all know how easily the excuses appear when a little effort is required, hi.
I wasn't thinking of actually buying the SGC kit - just picking up ideas prior to building something, but I will check your site and also pick up some Hustler info.

Thanks again, John G8OZH

3586. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <NSPA5.6745$qi7.639357@nnrp4.clara.net>
Source record: 179071

Richard,

Thanks for the reply. Unfortunately we drive the same rigs in name only. The 4-Runner over here was an all steel estate car version (like a 95/100 scale Land Cruiser) which offers a better ground plane from the full size metal roof but looses the easy option of mounting the tuner internally. I'm quite keen to mount on the roof as I believe the bumper and tow hitch types may suffer from some shielding or coupling effects due to proximity to the bodywork. If I'm looking for minimum visual impact I think I am already compromising performance considerably without looking for even more trouble ;)

The resonated roll bar sounds interesting - my wife drives a HiLux pick up with a roll bar made of 2.5 inch tubing.....

You are right about not purchasing the SGC kit - I'm just fishing around in many areas for ideas and while the commercial offerings may not be the best performers around they must have something going for them. Don't they? Really? Oh! Well to hell with 'em then....

73, John G8OZH

3587. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <NSPA5.6746$qi7.639857@nnrp4.clara.net>
Source record: 179072

Yuri says:
> The best think would be to put something on the roof (if it is metal),
but
then you are limited with height and is clumsy to take it down

Yep, metal roof, 6 feet off the road and quite large. It could be a problem with height and will certainly be a challenge to take down quickly, but an 'easy' location would surely compromise performance further. Who said life was meant to be simple....

Your comment noted re the location of the tuning elements at the base of the SGC system but this arrangement does help to keep the visual impact to a minimum. Another vote for the Hustler though.

Thanks Yuri, 73, John G8OZH

3588. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <OSPA5.6747$qi7.639764@nnrp4.clara.net>
Source record: 179073

M5WJF wrote:
>Have you considered an FT-100 + ATAS-100 combination?

In a word - No. I already have the radio (IC706) and I had not heard of the ATAS 100 until today. I see it is mentioned in another posting to this NG also. Another possible solution for me to investigate although I was originally intending to build my own antenna after picking sufficient brains!

Thanks for the response - and keep 'em coming.

73, John G8OZH

3589. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <OUPA5.1508$ai4.274496@news.ntplx.net>
Source record: 179074

Roy Lewallen <w7el@eznec.com> wrote:

> I'm sure this is what Ed means by an antenna with "directivity but no
gain".
> I'd rather say it has directivity (as do all antennas), and a gain less
> than 0 dBi.

Thanks, Roy; now you know why they won't let me edit anything. I was assuming that "gain" with no reference could be presumed to be gain over isotropic. I think it is all pretty clear now. I understood it before; now I know how to say it better. :-)

73,
Ed Hare, W1RFI

3590. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <B3QA5.1565$ai4.275076@news.ntplx.net>
Source record: 179075

Dan Richardson <k6mhe@arrl.net> wrote:

> Really admire your responding. I only wish you could respond outside
> you role at ARRL HQ, but understand your choosing not to do so.

Hi, Danny,

It is not even a question of my being permitted to respond outside my role at ARRL HQ; it is a question of my not being able to respond with what I believe to be accurate information. There certainly are questions about whether conjugate matching has been applied correctly in all cases (amplifier loading, for example). But, that notwithstanding, the articles are still a really good, albeit lenghty, explanation of SWR. IMHO, it is a question of technical, not ego, issues.

I have not gone through all of the math and steps so I really can't say that I fully understand all of the principles that are on the plate, so rather than offer what I would not feel certain of, I stick to what I know. I don't mind having a bit of egg on my face once in a while from a technical faux pas, but if I do, it is because I honestly misunderstood something. But I do not want to offer speculation instead of fact, especially coming from the ARRL Lab. Zack is more qualified than I to address it, and he did, in the July/August QEX (URL previously posted).

Heck, those who have seen me post know that, if I feel comfortable that I know the answer, I am more than willing to post about a wide range of ARRL topics, including, in some cases, my perceptions of the sense of the ARRL Board. :-) There are times when discretion is required in my public participation (publications plans, in-progress work with Board committees, etc.) but this isn't one of them. Sorry, but it really isn't that Ed knows something that he is not telling. :-)

73,
Ed Hare, W1RFI

3591. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928190709.17652.00000031@ng-cc1.aol.com>
Source record: 179076

>
>
>Fractenna wrote:
>
>> >>From: Dick Carroll dixie@townsqr.com
>> >
>> >>I understand that ARRL removed his book "Reflections" from their sales
>> >>inventory because of such protests by one or more of these efficiency
>> >>experts. That is really a shame, indeed a travesty.
>> >
>> >Why do you use the term "travesty" here, Dick? ARRL clearly has no
>prejudice
>> >against Maxwell or the concepts presented in Reflections. On what basis
>do
>> >you
>> >conclude that the League removed the book over "protests" rather than the
>> >level
>> >of sales?
>> >
>> >73,
>> >Ed Hare, W1RFI
>> >
>>
>> Dick has a history of making outrageous, incorrect statements meant to
>tarnish
>> the reputation of others.
>>
>> Why don't you quote some of your comments about me last year, Dick?
>>
>> 73
>> Chip n1IR
>
> You, Sir, are an outrageous statement, and your toy-tennas for which you
>steadfastedly refuse to provide any cogent explanation, instead petulantly
>referring anyone who asks to a non-existant website "explanation" to search
>in
>vain for something -anything!- that would confirm that they are anything more
>than
>some fancifully decorated version of longstanding concepts, are even more
>outrageous. I concluded long ago that any time spent on you and your
>"invention"
>is time wasted.

As posted several times on this NG---

I suggest you start with Hohlfeld and Cohen:"Self Similarity and the Geometric Requirements for Frequency Independence in Antennae", published in the peer reviewed journal FRACTALS last year.

Note that I made, and many people took advantage of, a free offer on this NG for copies of said article.

It is still possible to get copies of the article --to fractal antenna member subscribers.

To join:

fractalantenna-subscribe@egroups.com

Also note that even in the early publications from 1995 and 1996, I made a point of providing explanations for how fractal element antennas work. Indeed, I have discussed them many,many times on this NG. Now I continue to answer the relevant questions on a moderated list with archive storage.

I have found that the most handy and the best way to help those with a bona fide interest.

You are certainly correct that, in general, I no longer answer such questions on this NG. I do , on occasion, respond, but IMHO, you would do best to pose any questions you have on the fractal antenna reflector.

If you believe I tarnished your reputation, you are more
>than
>welcome to repost anything I said yourself. I wouldn't waste my time.
>

I do not understand the contradiction. Do you deny that you made false assertions--indeed as you have just done-- on this NG concerning me?

>

73
Chip n1IR

3592. Re: Help with HF mobile antenna - SO-239 to 3/8" x 24?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <20000928190923.19911.00000073@nso-fr.aol.com>
Source record: 179077

In article <39D153C8.B17F3A71@swbell.net>, Darren Ream <reamesq@swbell.net>
writes:

>I am trying to install a 20 meter hamstick on my automobile but am
>having trouble. A Comet GR5V mount which I plan to use is already
>installed on the trunk lip. Problem is, this mount has an SO-239
>connector and the hamstick usesa 3/8" x 24 mount. All I need is a
>SO-239 to 3/8" x 24 adapter but can't find it anywhere. Several
>manufacturers make an NMO to 3/8", so I guess I could use one with a
>SO-239 to NMO adapter if I could find one of those, but I can't! My
>current GR5V mount was a bear to install. I have it and the coax
>situated exactly where I want it and I also want to continue to use my
>SO-239 antennas occasionally, so I don't want to have to change mounts
>if I can help it.
>If I could just find an SO-239 to 3/8" adapter, my problem would be
>solved.
>Anyone have any ideas?
>Any suggestions would be much appreciated.

If the silly thing looks like the Diamond ones, unscrew the present one, and go
to Radio Sack and look for the SO-239 base & 3/8 Threaded mount on the top, and
screw that in to replace it. It's simpler than looking for an adapter if I'm
correct, and if not, well at least I'm not telling you to waste money, since
I'm telling you to unscrew the present adapter on the mount.
-art clemons-

3593. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <2209-39D3CA3A-26@storefull-113.iap.bryant.webtv.net>
Source record: 179078

Ed Hare wrote:
" G = eff*D
So an inefficient antenna (ie, loopstick) can have directivity, but no gain."

F. E. Terman`s "Electronic and Radio Engineering" says on page 870 of the 1955 edition:
"Directive gain depends entirely on the distribution in space of the radiated power. The power input to the antenna, the antenna losses, or the power consumed in a terminating resistance have nothing to do with directive gain."

Terman said nearly the same thing Ed Laport said. When the experts echo each other, you should seriously consider what they say.

Best regards, Richard Harrison, KB5WZI

3594. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928192634.17974.00000040@ng-cr1.aol.com>
Source record: 179079

>The power input to the antenna, the antenna losses, or
>the power consumed in a terminating resistance have nothing to do with
>directive gain."

This is correct.

That what I learned 27 years ago.

73
Chip N1IR

3595. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D3D57E.32FC1740@hiwaay.net>
Source record: 179080

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. His "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

Fractenna wrote:
>
> >
> >
> >Fractenna wrote:
> >
> >> >>From: Dick Carroll dixie@townsqr.com
> >> >
> >> >>I understand that ARRL removed his book "Reflections" from their sales
> >> >>inventory because of such protests by one or more of these efficiency
> >> >>experts. That is really a shame, indeed a travesty.
> >> >
> >> >Why do you use the term "travesty" here, Dick? ARRL clearly has no
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> >> >against Maxwell or the concepts presented in Reflections. On what basis
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> >> >you
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> >> >73,
> >> >Ed Hare, W1RFI
> >> >
> >>
> >> Dick has a history of making outrageous, incorrect statements meant to
> >tarnish
> >> the reputation of others.

> >>
> >> Why don't you quote some of your comments about me last year, Dick?
> >>
> >> 73
> >> Chip n1IR
> >
> > You, Sir, are an outrageous statement, and your toy-tennas for which you
> >steadfastedly refuse to provide any cogent explanation, instead petulantly
> >referring anyone who asks to a non-existant website "explanation" to search
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> >vain for something -anything!- that would confirm that they are anything more
> >than
> >some fancifully decorated version of longstanding concepts, are even more
> >outrageous. I concluded long ago that any time spent on you and your
> >"invention"
> >is time wasted.
>
> As posted several times on this NG---
>
> I suggest you start with Hohlfeld and Cohen:"Self Similarity and the Geometric
> Requirements for Frequency Independence in Antennae", published in the peer
> reviewed journal FRACTALS last year.
>
> Note that I made, and many people took advantage of, a free offer on this NG
> for copies of said article.
>
> It is still possible to get copies of the article --to fractal antenna member
> subscribers.
>
> To join:
>
> fractalantenna-subscribe@egroups.com
>
> Also note that even in the early publications from 1995 and 1996, I made a
> point of providing explanations for how fractal element antennas work. Indeed,
> I have discussed them many,many times on this NG. Now I continue to answer the
> relevant questions on a moderated list with archive storage.
>
> I have found that the most handy and the best way to help those with a bona
> fide interest.
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> You are certainly correct that, in general, I no longer answer such questions
> on this NG. I do , on occasion, respond, but IMHO, you would do best to pose
> any questions you have on the fractal antenna reflector.
>
> If you believe I tarnished your reputation, you are more
> >than
> >welcome to repost anything I said yourself. I wouldn't waste my time.
> >
>

> I do not understand the contradiction. Do you deny that you made false
> assertions--indeed as you have just done-- on this NG concerning me?
>
> >
>
> 73
> Chip n1IR

3596. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a0cd80f.547028465@news.seanet.com>
Source record: 179081

On Thu, 28 Sep 2000 20:28:08 +0100, "John Burrell" <john@tg8ozh.com>
wrote:

>
>You are right about not purchasing the SGC kit - I'm just fishing around in
>many areas for ideas and while the commercial offerings may not be the best
>performers around they must have something going for them. Don't they?
>Really? Oh! Well to hell with 'em then....
>
>73, John G8OZH
>

Hi John,

My buddy John (AA7UJ) uses the SGC for his big Ford (he also has a 5
band diplexer for VHF-UHF). We have the advantage that SGC is located
here in town. I can't recommend it myself because I don't make the
big bucks he does as a salesman. :-<

73's
Richard Clark, KB7QHC

3597. Re: VHF/UHF Ham/Business Band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D3DC99.16684512@oio.net>
Source record: 179082

Bill Crocker wrote:
>
> Are most base, dual-band antennas designed for Ham radio, close enough to be
> used for the VHF/UHF business bands? Or should I buy an antenna designed
> for those bands?
>
> Thanks,
> Bill Crocker

First question, what business band frequency? And I think I'd
~buy~ an antenna designed for the band I was using.
'Doc

3598. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d3df80.10013171@news.akorn.net>
Source record: 179083

On Thu, 28 Sep 2000 23:54:53 GMT, william ewald <wgewald@att.net>
wrote:

>On Wed, 27 Sep 2000 17:19:38 -0700, Phillip Sikes <psikes@whidbey.net>
>wrote:

>>I must be missing something here. I am not an antenna guru by any
>>means but I have modeled a 40M Delta and a 40M dipole and the Delta
>>came out better by 1.8dB over the dipole. I was using Nec4Win to do
>>the modeling, is there a problem with this software?
>
> I have a question about all these models. How are they verified
>as to their results?

At different heights, the results are different. If you place the
antennas in freespace, that is where the gain advantage is maximum
when changing from a dipole to loop. The maximum change is about 2 dB
under ideal conditions.

If you place the antenna as was discussed (close to the ground) the
loop can actually have loss. At best, it has virtually no gain.

As you move the antenna to different heights you'll see the gain
difference goes through gyrations ranging from almost no gain to
almost the same as the freespace difference.

Loops do not have "2 dB gain" at all heights, and the do not offer 2dB
gain at any height over dipole elements when multiple elements are
involved.

They don't do anything at all in low horizontal loops.

73 Tom

3599. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <8r0p4b$6n4$1@slb2.atl.mindspring.net>
Source record: 179084

Dan Richardson wrote in message <39d39f20.437564@news.mcn.org>...
>
>
>Granted a belief is a belief and I can't "prove" anything, however,
>it is based upon (questionable?) actions that I have observed.
>
>
>vry 73
>Danny

If it walks like a duck and quacks like a duck.............

Dean Craft -- W4IHK

3600. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D3E8BF.CFF4F804@mwci.net>
Source record: 179085

CAM wrote:

> what good is a conjugate match if it causes
> nothing different to occur in reality? The two systems above are Z0-matched
> and, neglecting losses, that seems good enough to get the identical amounts
> of power to the loads with 70.7 volts and 1.4 amps. Z0-matches seem to be
> the important thing to hams, not conjugate matches.

The transmitter was designed to work into a 50 ohm load. If you supply that load you are in business. In my years at Rockwell Collins or as W0IYH I can't remember one time when I was concerned about Zout or conjugate match of a PA. I do know that a few others were concerned in special applications. TV and other special transmitters worry about output impedance. They don't want re-reflections at the xmtr. Circulators are sometimes used to absorb reflections.

Let me repeat something that I have said before (all of this stuff is deja vous all over again every year or so). If you start at the antenna terminals and look only in the forward direction and work backwards toward the transmitter, and get everything tuned up and working as you work toward the transmitter, and never look backward, then at some point you arrive at the transmitter output terminal and everything is FB OM and you don't know, and couldn't care less what the output impedance of the PA is. You dip and load, set the meters where you want them, look at distortion products on the spectrum analyzer, and you go to lunch. You are finished, and you don't have a clue about conjugate match.

Unless it is really important.

Bill W0IYH

3601. Re: Standards

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <qcs7ts0q54r7npuoihjbmbemc8niah5pig@4ax.com>
Source record: 179086

On Fri, 29 Sep 2000 00:05:13 GMT, william ewald <wgewald@att.net>
wrote:

> Isn't NBS now NIST, and the standard meter, not a platinum
>meter stick but 1,659,763.73 vacuum wavelengths of light resulting
>from unperturbed atomic energy level transition 2p10 ï¿½ 5d5 of the
>krypton isotope having an atomic weight of 86 (= 1m/1,650,763.73 =
>0.605,780,211 ï¿½m)?

No, that's a canard put out by the left-wing media. Actually, NIST
just calls me up now and then and asks "what time is it now, Bill?"
and readjusts their clock accordingly.

73, Bill W7TI

3602. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D3F214.DD3DF7F8@bigfoot.com>
Source record: 179087

VE9SRB wrote:
> Looking at it from that perspective, I would have to agree. I wonder what
> the internal power dissipation is in each case? (ha)

That's an efficiency question. If an amplifier has been designed
for maximum efficiency, who cares what the output impedance really
is if it is looking into a Z0-match, i.e. no reflections? Seems to
me the Z0-match has all the positive characteristics of a conjugate
match without the excess emotional baggage. That's why I talk about
Z0-matches achieved at the input of antenna tuners instead of
conjugate matches achieved at the output. The Z0-match point is where
the reflections are neutralized and their energy joins the forward waves
such that forward power equals generated power plus reflected power.
--
http://www.mindspring.com/~w6rca

3603. Re: Toytennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D3F3AC.B92F3349@hiwaay.net>
Source record: 179088

Damn- all this time I thought he had me filtered out.

Hope this helps

Fractenna wrote:
>
> >
> > 29 Sep 2000 00:43:50 GMT dans l'article
> > <20000928204350.28388.00001124@ng-fc1.aol.com>
> > l'honorable Fractenna <fractenna@aol.com> escrivit :
> >
> >:It is indicative of the overall absence of viability manifest by a majority
> >of
> >:posts on this NG.
> >:
> >:Hope this helps.
> >
> >Yes it does, because the majority of posts on this newsgroup
> >comes from Fractenna <fractenna@aol.com>
> >
> >--
> >Gilbert.
> >
>
> Hardly.
>
> Lately they seem to come from Bill Aycock and you.
>
> 73
> Chip n1IR

3604. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r0s8fctt1@bob.news.rcn.net>
Source record: 179089

Anyone can check this out...the TRUTH.

http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

3605. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D3F3BF.C26AD93A@bigfoot.com>
Source record: 179090

John Burrell wrote:
> Here in UK we do still have Class A = any amateur band operation ...

Sorry John, I missed your call and couldn't tell you were in GB
from your email address. Didn't GB email address once end in
...com.gb?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3606. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <TCSA5.1833$ai4.283916@news.ntplx.net>
Source record: 179091

<ehsjr@bellatlantic.net> wrote:

in message news:39D3DC7C.CDC5FF9@bellatlantic.net...

> > I am much more inclined to believe the prediction that EZNEC makes than
> > to accept what your analyzer reads under the experimental conditions you
> > described.

> Me too. That's why I am so puzzled. I've NEVER had a dipole whose
> minimum swr after pruning was 1:8 to 1. That's why I asked others to
> experiment and post their results. And why I asked Ed to check it out,
> to ensure that there wasn't a "finger check" when he ran the program.

It doesn't look like much of a finger error; I just ran it again here at
work (NEC-4 engine) and got Z=81.7+j0.1 for a resonant 6 M half-wave dipole
8 feet over average ground.

> A possible answer came in E-mail. It said: "Note that minimum SWR
> is not always consistent with resonance." And Ed's post talked about
> 1:8 to 1 at resonance - it didn't say minimum swr.

The SWR did not change much when I went above or below 50.2 MHz, the
frequency for which I designed the antenna. It remained near 1.6:1, in this
case.

> Bottom line - I can get the swr below 1:2 to 1 on all of these antennas.
> Sideband's dipole gets a minimum of 1:8 to 1 and goes up on either
> side of that (or it did, before he moved the coax). So I still maintain
> that there is (or at least was) something wrong when the minimum
> swr was 1:8 to 1, and I challenge Ed's assertion that the antenna
> is working perfectly.

Something is sure going on. :-) The following graph shows how the
resistive component of the EZNEC model varied with height above ground.
See:

http://www.arrl.org/~ehare/temp/6mdip.jpg

> Does EZNEC insist that a 50 mhz dipole (8' above ground but
> otherwise clear of influence of nearby objects) at *minimum* swr
> will be close to 1:8 to 1 ? If so, it is wrong.

In running it here over average ground, it says 1.6:1 is what you should get
at 8 feet. I don't recall my ground parameters when I ran it at home.

> Another question: I've always thought that a dipole exhibited minimum
> swr close to resonance - again, assuming it is in the clear of objects
> other than ground.

That is my modeling and real-world experience.

73,
Ed Hare, W1RFI

3607. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r0ug9$rl4$1@bob.news.rcn.net>
Source record: 179092

Post a file here the refutes the objective evidence presented in:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

Are you even capable of a clear description matching:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

Explain why this model is not correct:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

This has nothing to do with copyright which has NOT
been violated in any way so please, Mr Cohen, why is this model incorrect?
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

We are waiting to see an answer as concise and definitive as:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

3608. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r0ves$5hg$1@bob.news.rcn.net>
Source record: 179093

As I suspected...obfusation...and no answer.
Fracky, please try again with an answer.

3609. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r0vm6$7aq$1@bob.news.rcn.net>
Source record: 179094

"obfuscation"

3610. Re: Standards

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <EP=TOWFJ5snTv=M3TLII18UA+lnM@4ax.com>
Source record: 179095

On Fri, 29 Sep 2000 00:05:13 GMT, william ewald <wgewald@att.net> wrote:

>On Wed, 27 Sep 2000 23:19:09 GMT, rwclark@seanet.com (Richard Clark)
>wrote:
>
>>On Wed, 27 Sep 2000 16:53:39 -0500, CAM <cam2338@bigfoot.com> wrote:
>>
>>>
>>>But this may be akin to saying that the yardstick at the NBS is not exactly
>>>a yard long. Exactly how far can a real world Conjugate Match deviate
>>>from an ideal Conjugate Match and still be called a Conjugate Match. Are
>>>we talking 0.000001% accuracy or 10% accuracy?
>>>--
>>>http://www.mindspring.com/~w6rca
>>
>>Hi Cecil,
>>
>>The yardstick is in Paris. And it isn't a yard long (unless we're
>>talking about about 10% accuracy).
>>
>>73's
>>Richard Clark, KB7QHC
>
> Isn't NBS now NIST, and the standard meter, not a platinum
>meter stick but 1,659,763.73 vacuum wavelengths of light resulting
>from unperturbed atomic energy level transition 2p10 ï¿½ 5d5 of the
>krypton isotope having an atomic weight of 86 (= 1m/1,650,763.73 =
>0.605,780,211 ï¿½m)?

Hi OM,

I will trust your numbers and add Amen!

But the "yardstick" is still in Paris.

Of note, when you mention the wavelengths as standard, many standards are wavelength based. Standard Capacitors are ultimatley based on a coaxial design, whose dimension in the axial direction (sliding one tube into another tube separated by an insulator) is set and measured using laser interferometry. The measure of Time is based on a specific wavelength of Cesium. Time being defined, Frequency follows.

The Volt is defined by a quantum effect, the Josephson Junction, and hence Resistance and Current follow. I can't tell you how sad it is to see Standard Cells, the premier Voltage Standard in the world for 8 decades, being kicked around in junk boxes at swap meets.

73's
Richard Clark, KB7QHC

3611. Re: Missing out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <dgPUOQ2VNoNnp8V9PwJThx7OJ0Vz@4ax.com>
Source record: 179096

On Fri, 29 Sep 2000 00:16:00 GMT, william ewald <wgewald@att.net> wrote:

>
>I was interested in a fractal antenna for 440 Mhz, and in the theory
>behind the idea of possible benefits of the type, but the person I
>though might have the answers was as coy as Sally Rand in her
>fan-dance routine.

Hi OM,

You lookin' to get your information from an authoritative source?

Or could you get by with the ramblings of a fool (certified highly erroneous by well known and widely respected Doctors of Learning) such as myself (BA English)?

Mea Culpa - Veno Vat

Fractals. They come in three flavors: Big and small. What color do you want?

So much for theory.

Big means gain. Small means - uh - well small! Geez.

So much for benefits.

Of course much more can be said and much has - to no great positive effect.

440 MHz? You can go small (isn't this small enough?) and find a nice match with performance on par with the antenna it is replacing. Or you can go Big and find gain (small print: some models require additional assembly to match to Hi-Z, speak to your dealer about our wonderful assortment of options (your mileage may suffer causing tread separation)).

To boil it all down, fractals relative to either a monopole or dipole exhibit higher gains on average (in the so-called DX angles); wide matches (unlike trapped designs); and for the Big guns flat response across bands. The downside? They're - uh - fractals! Geez.

I hope I proved to be less than coy :->

73's
Richard Clark, KB7QHC (-10 dBcoy ï¿½3 dB; next calibration due 1/1/01; #11)

3612. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <HBHUOZZflvu+AFclGto6G6+75Hxb@4ax.com>
Source record: 179097

On Fri, 29 Sep 2000 02:21:37 GMT, Gilbert Mouget <gilbert.mouget@waika9.com> wrote:

>
> 29 Frc 2000 02:03:12 TZG qnaf y'negvpyr
> <20000928220312.22419.00000081@at-qn1.nby.pbz>
> y'ubabenoyr Senpgraan <senpgraan@nby.pbz> rfpevivg :
>
>:Jryy, gura fubj hf jung gur 'ubnk' vf. Jung'f fgbccvat lbh?
>:
>:V jnf hanoyr gb ybpngr gur svyrf lbh zragvbarq.
>:
>
>V nz abg tbvat gb qb lbhe ubzr jbex sbe lbh.
>Lbh jrer hanoyr gb ybpngr gur zragvbarq svyr orpnhfr gur fhowrpg
>vf ctc rapelcgrq jvgu frperg senpgny ebg13 (cngrag craqvat)

Uv Tvyoreg,

Guvf vf gur svefg gvzr va fbzr 4 lrnef V'ir frra ebg13 hfrq urer. ubj zhpu cebcntngvba qrynl jvyy guvf rkuvovg sbe gur nirentr cuq?

73'f
Evpuneq Pynex, XO7DUP

3613. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D41430.49615DBF@mindspring.com>
Source record: 179098

Did you guys see my post last sunday where I said I found the problem and got it down to 1.4:1 ? Just wondering. :-)

ehsjr@bellatlantic.net wrote:

> "George, W5YR" wrote:
>
> > I do not mean this personally so put the blow torch away! <:}
>
> LOL! Who the hell am I to flame anybody for something
> technical about antennas! Besides, try as I might, I can't find
> anything in your post to flame.
>
> > I am much more inclined to believe the prediction that EZNEC makes than
> > to accept what your analyzer reads under the experimental conditions you
> > described.
>
> Me too. That's why I am so puzzled. I've NEVER had a dipole whose
> minimum swr after pruning was 1:8 to 1. That's why I asked others to
> experiment and post their results. And why I asked Ed to check it out,
> to ensure that there wasn't a "finger check" when he ran the program.
>
> A possible answer came in E-mail. It said: "Note that minimum SWR
> is not always consistent with resonance." And Ed's post talked about
> 1:8 to 1 at resonance - it didn't say minimum swr.
>
> Ok that said, I went further. I attempted to build a stiff wire antenna
> to avoid the effects of end loops/insulators. This was a half-assed
> antenna. I made it out of #6 bare copper wire. I had to use a 26"
> piece of 1/2 plywood in the center - I mounted the elements to that.
> It worked temporarily, but the elements would slowly sag. Anyway,
> I screwed the wood to the top of an 8' 2x4 and the swr was flat (could
> just barely see the needle move on the swr meter) at the design frequency.
> But when I moved the thing close to the house, the swr went up to about
> 1:7 to 1. Unfortunately, I couldn't move the thing around as I hoped without
> causing the elements to sag before the motion was complete, so I can't
> say that changes were solely due to proximity to the house. Sigh. I guess
> I'm going to have to get fiberglass poles to simulate sideband's antenna.
>
> I then disassembled a 3 element 6 meter yagi that I've been experimenting
> with. (Trying to learn stuff you guys already know.) I kept the driven element
> on the boom. Swr was flat after adjusting the gamma. This is a monopole,
> so it doesn't count - but I still get a flat swr. I put together a shortened
> copper pipe (1/2 inch) dipole fed thru a 5 turn coil wrapped on a broom handle
> and I can adjust that flat, too, by compressing/expanding the coils.

>
> Bottom line - I can get the swr below 1:2 to 1 on all of these antennas.
> Sideband's dipole gets a minimum of 1:8 to 1 and goes up on either
> side of that (or it did, before he moved the coax). So I still maintain
> that there is (or at least was) something wrong when the minimum
> swr was 1:8 to 1, and I challenge Ed's assertion that the antenna
> is working perfectly. Maybe it should be 1:8 to 1 at resonance -
> but I can't see it being 1:8 to 1 minimum in the absence of effects
> other than being 8' above ground. I believed then, and still believe
> that it is the effects of being near the structure that are causing
> the minimum Swr to be 1:8 to 1 (originally) and 1:4 to 1 (now).
> I believe that the antenna should be able to be adjusted so that
> the minimum swr will be below 1:2 to 1 if it is installed 8' above the
> ground in the clear.
>
> Does EZNEC insist that a 50 mhz dipole (8' above ground but
> otherwise clear of influence of nearby objects) at *minimum* swr
> will be close to 1:8 to 1 ? If so, it is wrong.
>
> Another question: I've always thought that a dipole exhibited minimum
> swr close to resonance - again, assuming it is in the clear of objects
> other than ground.
>
> > Your results simply do not agree with the theoretical basis
> > on which that antenna is working. There are just too many things that
> > can take place in any experiment, no matter how well contrived and
> > executed, that can produce results that differ from "theory."
> >
> > In itself, those results do not disprove "theory" rather they raise
> > doubt as to be validity of the experimental conditions.
> >
> > I know that you are trying here and doing a yeomanlike job at it, but
> > don't be too quick to write off decades of work in this area on the
> > basis of a ten-minute experiment. And, as gently as I can put it, I
> > would not rely completely on the accuracy of that analyzer.
> >
> > Please keep us posted on your work - this is interesting stuff!
> >
> > --
> > 72/73, George W5YR - the Yellow Rose of Texas
> > Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
> >
> > ehsjr@bellatlantic.net wrote:
> > >
> > > W1RFI wrote:
> > >
> > > > >From: sideband@mindspring.com
> > > >

> > > > > I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> > > > > have the use of a MFJ 259 analyzer. I am only able to put
> > > > >this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> > > > >complex and currently have it hidden under the wooden balcony
> > > > >of the apartment above me. The SWR is currently about 1.8 at 50 MHz.
> > > >
> > > > This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above
> > > > ground. The antenna, when resonant, would have a feed-point impedance of 90
> > > > ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.
> > >
> > > Ed, I've got a real problem with that. By real problem, I mean:
> > > I went out and threw together a 6 meter dipole out of zip cord,
> > > hung it at 8' (actually, 102 inches and also re hung at 95 inches)
> > > and got a flat SWR on the MFJ 259. The analyzer needle barely
> > > moved. I then remade the dipole - no loops at the end, and wire-tied
> > > it to a nylon messenger rope. At 92 inches height I got 1.4 to 1. I
> > > assume the difference is due to the wire ties and the fact that the
> > > antenna was in contact with the support rope for its full length.With
> > > no end loops it had minimum swr at about 52.3 mhz. With end loops
> > > (to tie the support ropes to it) the minimum SWR was at about 56.1
> > > I would have used egg insulators instead of loops if I had some on
> > > hand. The feedpoint is an S0-239 with about 20' of RG 58. I added
> > > a 4' coax extender cable and re-measured each time - no change in
> > > the swr. The antenna was installed over wet soil, and the nylon rope
> > > was slightly damp from laying on the grass for about 5 minutes.
> > >
> > > Ok, that said, the reason I did this is that I've never built a dipole
> > > with a 1:8 to 1 SWR after pruning. I find the cited EZNEC figure
> > > hard to believe - so hard that I had to check it. I still intend to do
> > > more checking, but bottom line, I find the EZNEC number
> > > highly suspect. Could you please re-check it? I don't have
> > > EZNEC so I can't. I would also ask others to spend a few minutes
> > > building the antenna and posting the SWR minimums they find.
> > > You only need to split 5 feet of zip cord (or use 10 feet of single
> > > conductor) and an S0-239 (or just solder the coax to the elements)
> > > and can slap the thing together real quick. I'm going to re-do
> > > my experiment, using egg insulators. If there was no "finger check"
> > > when you ran it and EZNEC gives 1:8 to 1 then real world measurements
> > > have to come in very close or need an explanation as to why they
> > > are so far off. According to my analyzer, the antenna was 50 ohms
> > > at resonance. The analyzer checks out into a dummy load, and
> > > measurements with my bird and 2 swr meters (Daiwa cross needle
> > > and Welz) on my antennas have compared the same as with the analyzer
> > > in the past (I did not check today) so I don't think there is anything wrong
> > > with it. I really suspect that EZNEC figure.

--
The preceding may or may not have been authored by myself but I offer it to you for your perusal.
Feel free to read as little or as much of it as you like. Be forewarned that I refuse to

use a
spell checker and don't take criticism well.

3614. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D41991.4190DCE0@bigfoot.com>
Source record: 179099

VE9SRB wrote:
> The only energy "joining" the forward traveling wave is the energy that is
> partially re-reflected at the point of reflection, which, in the case of the
> tuner, is not at the match point.

100w-->--51.5 ohm coax--x--1/4WL 300 ohm line--51.5 ohm load

P+
--->100w--->----x---->200w----->-----+---51.5 ohms
Pg ^ | 100 w
| | Prad
+----<--100w--<------+
P-

In fixed format, values chosen to make P- = P+/2
100 watts generated, 100 watts reflected, 200 watts forward at the
Z0-match point. It certainly appears that the reflected energy can
be considered to have reversed direction and joined the generated
energy on a trip back to the antenna. There is no tuner and the
Z0-match is a point. There are no reflections to the left of the
Z0-match point and reflections exist to the right of the Z0-match
point.

> I told Walt that I would not debate these particular points on usenet again.

Why? It's a simple concept. Pg+P- = P+. 100+100=200. Why are you
afraid to discuss it in public?

> Would you prefer to take this topic offline?

Nope! That takes all the fun out of it. :-)
--
http://www.mindspring.com/~w6rca

3615. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D41C68.DEBCC2CE@bigfoot.com>
Source record: 179100

"J. Mc Laughlin" wrote:
> That is about what a group of our faculty who teach circuits
> decided. It is interesting, but practical uses are few. Little, if
> any, time is spent on the theorem any more. It might be mentioned as
> an example of intellectual excess as it was misused (some time before
> I was born) to prove that electrical power plants could not be built -
> half the power generated would be dissipated in the power house
> resulting in melted power houses. [I understand the error of this as
> well as you do!]

So what's to keep us hams from running our generators like the power
company runs theirs? Exactly what is wrong with high efficiency?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3616. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D4256B.4035B2EB@eznec.com>
Source record: 179101

I have very high confidence in the ability of EZNEC and similar programs to predict the SWR of an antenna as simple as a dipole. Its ability to do so has been verified on many occasions.

Accurate measurement of input impedance and SWR is much more difficult than calculation, and subject to many more sources of error. These include, but are by no means limited to:

-- Stray shunt and/or series reactance in the measurement instrument
-- Calibration of the measurement instrument
-- Common mode feedline current

Also, factors may be present which aren't included in the model, such as:

-- Capacitance of loops at antenna ends
-- Capacitance of end insulators
-- Reactance at the feedline connection point
-- The effect of nearby objects

I've measured "50 ohm" feedline at over 60 ohms of impedance; this isn't uncommon. The impedance transformation caused by an incorrect impedance will result in an incorrect SWR indication.

Finally, there's the matter of feedline loss. A load which would indicate 1.8:1 SWR with lossless feedline will show 1.6:1 if the line has only one dB of loss, or 1.44:1 if the line has 2 dB of loss. And this is assuming that the "50 ohm" line is really 50 ohms.

The factors not included in the model can frequently be included if known, and the line loss and impedance accounted for, in which case the program will give an accurate inducation of the SWR which would be read with an accurate meter. But you do have to account for these if you want a truly accurate result from the program. Garbage in, garbage out.

Compared to accounting for and controlling all these factors, calculation is a cinch.

Roy Lewallen, W7EL

3617. Re: 1997 Jeep Cherokee/ATAS 100 - Which Mount???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Todd <ktm@lanset.com>
Message-ID: <39d42b28@sacnews.sac.bfp.net>
Source record: 179102

Use a Wilson 1000 or 5000 trunk lip mount.

"Jason S. Hulet" <jhulet@aol.com> wrote in message
news:20000928152019.29409.00000027@ng-cq1.aol.com...
> Hello,
>
> Looking to install a ATAS 100 antenna on a 1997 Jeep Cherokee. This
Cherokee
> has a metal hatch. Which mount, besides a mag-mount, to use for the ATAS
100 ?
>
> Thanks for any suggestions...
>
> Jason
> W1WOW

3618. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000928121500.08694.00000043@ng-cf1.aol.com>
Source record: 179119

First he says:

>U R CH1CKN!<
>BAWK!!!<

Then he says:

>Exactly the kindly of shameless nonsense that justifies said moderation.<

To which I cry, "Moderate thyself, oh foul and ficticious scion of orderly deeds!". Were but the vile hole thou dig a fathom more, thy calling would be BU1IR!

Rick K1BQT

3619. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26942-39D366A0-5@storefull-111.iap.bryant.webtv.net>
Source record: 179120

Steve, VE9SRB wrote:
"In general, the existence of a conjugate match and an impedance match are unrelated."

The magnitude of an impedance can equal that of another with different values of r and jx because (r+jx) can have the same total with many different values of r and jx. But, to say a conjugate match and an impedance match are unrelated is , in my opinion, junk science.

Best regards, Richard Harrison, KB5WZI

3620. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26942-39D36C6A-6@storefull-111.iap.bryant.webtv.net>
Source record: 179121

Dick, W0EX wrote:
"I`d very much appreciate a full disclosure by the League on exactly what happened and why."

Absent a long overdue palace coup d`etet, don`t hold your breath.

Best regards, Richard Harrison, KB5WZI

3621. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d3766c.27536503@news.akorn.net>
Source record: 179122

On 28 Sep 2000 15:00:38 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>> Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
>> against Maxwell or the concepts presented in Reflections.
>
> That may be clear to you, Ed but it "clearly" is not clear to many others. The
>original
>complaint resulted in the book being pulled and discontinued, based on sources
>both here on rraa and other places. The original complainant whose name and
>callsign I don't recall, wrote criticisms in QST, as I recall. Shortly, Walt and
>his writings became persona non grata in League publications, according to some
>of the same sources.

Hi Dick and Ed,

I always picture it as an "tire problem" on a car.

A writer is either fully running or not. Either everything said flys
right through without question, or everything said stops.

Maxwell's tire was punctured because a few people concluded the
conjugate match explaination was no good. Some of the original
arguments were so flawed they were silly, like those concluding
conjugate match efficiency could only be 50%!

Instead of patching the flat tire, or having the problem looked at by
disinterested outsiders, the easiest solution appears to always be
junking the car by smashing it all up......no matter how well
everything else works.

Even if the issue of a conjugate match is and will always be
unaccepted by some, even if opinions always remain divided, it is
tragic to take it to a level where we are all deprived of a what was
one of the most useful books around on antennas and transmission
lines. Especially when the whole snit was over what happens inside a
PA.

No one has proven any of the real-world suggestions misleading, the
entire beef is that dreaded "conjugate match" idea and the damn
non-linear part of the system...the PA.

73 Tom

3622. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Gary Rotter <GR120994@exchange.SanDiegoCA.ncr.com>
Message-ID: <39d363e7$1@rpc1284.daytonoh.ncr.com>
Source record: 179123

See the article http://www.eham.net/articles/1223 on operating from a condo.

You will also want to check out the article on operating with attic antennas:

http://www.eham.net/articles/1074

I operated mobile when I lived in a condo. One of the CC&Rs prohibited operating a short wave reciver or transmitter!

John Pinckney <longleaf@pop.erols.com> wrote in message news:39D27D2B.EBBAB261@pop.erols.com...
> Ken,
>
> I'm in a similiar situation. I've had some luck with back-to-back Hamsticks for
> 20 on my deck. And, I have have a helical going three stories, up a tree in my
> backyard.
>
> GL/73
>
> John
>
> Firestone wrote:
>
> > I would like to appeal to the joint wisdom of this newsgroup to help
> > me solve a problem.
> >
> > I live in a townhouse with the usual cc&r crap, so I am trying to put
> > up the best antenna I can.
> >
> > The townhouse is 3 stories, levels, with the first (ground) level as a
> > "basement." It has aluminum siding on the back, a rear deck on the
> > second level, about 8 or 9 feet above the ground, and a minimal crawl
> > space for an attic. My shack is on the third level, in the rear, but
> > could be moved to the first level rear.
> >
> > So far I have had the most sucess with a random wire from the shack
> > window to the deck rail (wood), along the rail, and then to a wood
> > fence at the end of the property, total length approx 35-36 feet.
> >
> > Unfortunately, this setup is noticed by my next door neighbor, and I
> > have to put it up, take it down, etc which will be a pain in the
> > winter.

> >
> > Other things I have tried are hamsticks out the window with a single
> > counterpoise wire, a dipole in the shack room for 15 meters, and an
> > Isotron antenna on 15 meters. None of these has worked very well, and
> > the 8 foot hamstick is a bit of a job to maneuver in a small room.
> >
> > I was wondering about putting antennas under the deck, random,
> > shortened dipole, or loop, or any other ideas. The lowest band I want
> > to work is 40 meters, and I am trying to do this at qrp
> > levels. Moving, increasing power, and staying on vhf and above are not
> > acceptable answers.
> >
> > --
> >
> >
==========
> > Ken Firestone, W3CAT | For every problem there is one solution
> > ken@firestone.net | which is simple, neat, and wrong.
> > kenf@clark.net | -- H. L. Mencken
> >
==========
>

3623. Re: Tower installation publications? Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: KA9CAR John Dewey <ka9car@xarrl.net>
Message-ID: <8qvu46$as3$1@news.tribune.com>
Source record: 179124

Actually I got my info off of Rohns web site. It is pretty good.
KA9CAR

'Doc <w5lz@oio.net> wrote in message news:39D2CED2.1FE301ED@oio.net...
>
>
> Zoran,
> You might try contacting Rohn Tower. They used to have a
> specifications publication that covered their towers and
> installation specifications. No idea what it might cost now.
> Lots of good stuff in there.
> 'Doc

3624. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D37E0D.AABB08A2@bigfoot.com>
Source record: 179125

Richard Harrison wrote:
> If a large resistance loads a generator, a tiny power is delivered to
> the large resistance because the current through the large rsistance is
> tiny.

You obviously mean a resistance which is large compared to the generator source impedance. Seems to me, if the generator source impedance was zero, *ALL* the power would be transferred to the load. :-)
--
http://www.mindspring.com/~w6rca

3625. Re: FRACTAL QUAD YAGI--HITTING RECORD QSO RATES

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fgLA5.1211$ai4.254306@news.ntplx.net>
Source record: 179126

Fractenna <fractenna@aol.com> wrote:

> He wanted a generalized fractal antenna article. This was after I asked
for
> him to target a need so I could write about a specific design.

I guess he knows the overall needs of the publication; it is unfortunate that the article you wanted to write is not the one that he needed, but these things happen.

> I get asked to write such articles every 4 months or so by someone. I am
> committed to two at the moment.

Well, that should certainly help ensure that info on the fractal antenna design is available. You have been at this for several years, so at one every few months, there should be a lot of good info. I look forward to reading the bibliography that your site mentions as coming soon.

> At least Steve Ford asked me to write up the FQY for QST...that was
targeted.
> But also a bit deceptive.

> He was fishing without any true sense of interest INHO. My sense was it
was
> really meant for (requested for) QEX .

I generally would not base a public assessment that someone had been deceptive in his dealings with me on a "sense." Steve is tasked with filling QST every month, not QEX, and of late, the QST editors have very much wished they had more articles to choose from. If Steve took the time to ask you to write it up, it was because he wanted it. I am a bit curious about why you feel that Steve wanted a specific antenna construction article for QEX but also felt that Doug didn't want an article about a specific antenna? It sounds more like a communications breakdown, not a deception.

> I was asked to write for QEX before also. Rudy Severns wanted me to write
an
> article. Given Rudy's cordial and helpful manner I was willing to do
so--but
> then QEX changed editors again for the nth time...

Yes, a cordial and helpful manner is very much a facilitator of communications end productive end results.

73,
Ed Hare, W1RFI

3626. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D37F17.3A3B7FFA@bigfoot.com>
Source record: 179127

Dan Richardson wrote:
> Why were Walter's writings, which were many, deleted from the ARRL
> Antenna Book and ARRL Handbook at about the same time? It seems to me,
> and I think some others on the news group, that such actions certainly
> appear to be more political than technical.

It also closely followed a rebuttal of conjugate matching article
by W5OLY published in QST.
--
http://www.mindspring.com/~w6rca

3627. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <UpLA5.1212$ai4.254970@news.ntplx.net>
Source record: 179128

Dan Richardson <k6mhe@arrl.net> wrote:

> >Why do you use the term "travesty" here, Dick? ARRL clearly has no
prejudice
> >against Maxwell or the concepts presented in Reflections. On what basis
do you
> >conclude that the League removed the book over "protests" rather than the
level
> >of sales?

> If I am to assume by your statements that the decision to remove
> "Reflections" from publication was due to level of sales then I'll ask
> you this question.

I don't know what all the factors were that ended up in the discontinuance of the Reflections book, Dan. But I rather expect that if the sales volume was high, the book would not have been discontinued.

> Why were Walter's writings, which were many, deleted from the ARRL
> Antenna Book and ARRL Handbook at about the same time? It seems to me,
> and I think some others on the news group, that such actions certainly
> appear to be more political than technical.

What "politics" would be more important than techncial issues in a technical publication? If the editors chose to use what they felt was better material, in what way would that be "political?" What political advantage do you believe that ARRL would have gained by not publishing the material?

> Would you care to comment?

Most comments I could make would be outside the scope of my role at ARRL HQ, Dan, but there was no objection to the ARRL Tech Info Service reprinting Walt's QST series on the ARRL Web pages.

73,
Ed Hare, W1RFI

3628. Yaesu ATAS 100, out of the box - What do you need?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <20000928134245.14172.00000006@ng-cp1.aol.com>
Source record: 179129

Hello,

For those of you that have them...or know... I guy orders one of these ATAS 100 antennas... out of the box what will he need to get it up and running?

> What sort of mount can he use? What sort of threads?
> What sort of wiring is required?

Thanks!

Jason S. Hulet
W1WOW

3629. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <FsLA5.3366$7I4.192711@bgtnsc04-news.ops.worldnet.att.net>
Source record: 179130

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:26942-39D366A0-5@storefull-111.iap.bryant.webtv.net...
> Steve, VE9SRB wrote:
> "In general, the existence of a conjugate match and an impedance match
> are unrelated."
>
> The magnitude of an impedance can equal that of another with different
> values of r and jx because (r+jx) can have the same total with many
> different values of r and jx. But, to say a conjugate match and an
> impedance match are unrelated is , in my opinion, junk science.
>
> Best regards, Richard Harrison, KB5WZI
>

I'm not sure why you would consider my statements junk science. My statement are based on scientific fact (IMHO). In any general transmission line system, establishing an impedance match at one point in a system does not, in and of itself, establish a conjuagte match at the same point or at another point in the system. They are unrelated in that regard. I did not mean to imply that they can never exist together.

Let's consider establishing an impedance match and a conjugate match at the same point. For example, the tuner input. If you establish an impedance match at the tuner input, a conjugate match will exist at the tuner input if and only if the impedance seen looking rearward towards the transmitter is also equal to ZO. This requires the output impedance seen looking rearward into the transmitter to be ZO.

Let's consider the tuner input and output. In the special case of the lossless tuner, establishing an impedance match at the tuner input will result a conjugate match being established at the tuner output. This relationship requires two things. 1) the tuner be lossless and 2) that the impedance seen looking rearward from the tuner input towards the transmitter also be ZO.

In the case of a lossy tuner, establishing an impedance match at the tuner input will never result in a conjugate match (maximum power transfer to the load at the tuner output) being established at the tuner output. I have a very very simple example that I will post later tonight that should (will) prove this.

73,
Steve VE9SRB

3630. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <YwLA5.3371$7I4.192846@bgtnsc04-news.ops.worldnet.att.net>
Source record: 179131

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:26942-39D366A0-5@storefull-111.iap.bryant.webtv.net...
> Steve, VE9SRB wrote:
> "In general, the existence of a conjugate match and an impedance match
> are unrelated."
>
> The magnitude of an impedance can equal that of another with different
> values of r and jx because (r+jx) can have the same total with many
> different values of r and jx. But, to say a conjugate match and an
> impedance match are unrelated is , in my opinion, junk science.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi again Richard:

My statements were based on the following:

For a conjugate match to exist, an impedance match is not necessarily
required.

When an impedance match exists, it does not necessarily mean that a
conjugate match is established.

Clearly, there are always special cases where the two will exist together.
These are the basis of my statement that the two are "unrelated".

Steve

3631. Re: IsoLoop and IsoTron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: rrlanders2@my-deja.com
Message-ID: <8r01vvepa1@nnrp1.deja.com>
Source record: 179132

In article <8qvs5l$9ir$1@nnrp1.deja.com>,
wa2bfw@my-deja.com wrote:
> Since relocating out here to Calif. I'm going to have to go with an
<...snip...>

> I'd appreciate any comments. I'll be cross posting this ine
> rec.radio.amateur.antennas.
>

Hi,
I ran 3 coax runs to my attic.

Coax #1 has: 20 and 10 meter dipoles on them
Coax #2 has 30 and 15 meter dipoles on them.
Coax #3 has: a 40 meter dipole on it, I used 2 dipole shorteners
from Spi-Ro Mfg. Overall length 37'

My attic is about 35' long, for 30 and 40 I wrap the wire across
the end of the attic to the rafters on the side, let remainder dangle
down.

Much cheaper than the IsoLoop (or MFJ clone) and the IsoTron

BTW, the dipoles don't seem to interfere with each other - I don't
use a tuner for the 20/10 or 30/15 dipoles (actually I do when I
operate 18mhz or 12 mhz from the 20/10 meter dipoles...work into Europe
daily on 18 mhz).

For 40 I use a tuner for the CW portion of the band, as it
resonates around 7.260.

GL es 73, Rod WI0T

Sent via Deja.com http://www.deja.com/
Before you buy.

3632. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <HDLA5.1213$ai4.256054@news.ntplx.net>
Source record: 179133

Dick Carroll <dixie@townsqr.com> wrote:

> > Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
> > against Maxwell or the concepts presented in Reflections.

> That may be clear to you, Ed but it "clearly" is not clear to many others.

In what you posted, it looked to me that you felt your opinion was perfectly clear.

> If this is untrue, its past time for the League to end their silence on the
> matter and explain.This wouldn't be the first time controversies have been merely
> swept under the rug, rather than beng worked out to a *best result for ham radio*
> by the League.

The one who is in a position to explain the decisions about the content of ARRL books is Joel Kleinman, N1BKE, the Book Team Supervisor. Are you telling us that he did not respond when you asked him for an explanation?

> 1. I hear many hams are looking for the book but can't find it.

The book was based a lot on the original series of QST article, "Another Look at Reflections." The articles are still published on the ARRL CD ROMs and are available for download at:

http://www.arrl.org/tis/info/pdf/Reflect.pdf

Does the fact that ARRL still makes the articles available change your mind about the conspiracy theory, Dick?

73,
Ed Hare, W1RFI

3633. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D384BF.2DEE1288@bigfoot.com>
Source record: 179134

"Ed Hare, W1RFI" wrote:
> What "politics" would be more important than techncial issues in a technical
> publication?

That's a very interesting question, Ed, and a multitude of us, who
remember the happening, would certainly like to know the answer.
--
http://www.mindspring.com/~w6rca

3634. Re: IsoLoop and IsoTron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8r02cs$f6u$1@nnrp1.deja.com>
Source record: 179135

I asked a similar question a couple of months ago and I was refered to
an article on the ARRL database comparing those two antennas with some
other small antennas. If you're an ARRL member it's in the review
section on the ARRL web site. If you're not a member send me an email
and I'll send you a copy of the review.
Based on the review however I decided not to buy or try either of those
antennas but to stick with my wire dipole.

In article <8qvs5l$9ir$1@nnrp1.deja.com>,
wa2bfw@my-deja.com wrote:
> Since relocating out here to Calif. I'm going to have to go with an
> attic antenna for the time being. I'm leaning towards an AEA or MFJ
> IsoLoop for 10-30 and the IsoTron for 40/80. I've got some questions
> and would like comments on either or both of these unique antenna
> designs.
>
> First the IsoLoop:
> 1. Although no longer made by AEA, MFJ has picked up the slack here..
> There apparently were 2 versions of the antenna, the first had a
> metallic band as a loop, the second (newer) model has a tubular loop.
> There were also variations of the control box, and LCU-1, LCU-2 and
> IT-1, being the first, second and autotune type. Is my information
> correct? Can anyone tell me the differences, pros and cons of the
> different variants of the antenna and the controller? From what I can
> tell, the key point with these antennas is to have a welded variable
> hi-voltage capacitor.
> 2. Whats the latest info on the MFJ version? have they made
> upgrades/improvements since AEA got out of making these?
>
> Now the IsoTron
> 1. I've read good reviews about these and they seem a better solution
> to working 40 and 80 than the IsoLoop antenna. Does anyone have any
> experience with the 40/80 model that they would care to comment on?
>
> Has anyone tried both of these antennas and been able to make a
> real-life comparison between the two?
>
> I'd appreciate any comments. I'll be cross posting this ine
> rec.radio.amateur.antennas.
>
> Thanks, 73
> Marv
> WA2BFW/6
>

> Sent via Deja.com http://www.deja.com/
> Before you buy.
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3635. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D3868F.F8B1634@bigfoot.com>
Source record: 179136

VE9SRB wrote:
> For a conjugate match to exist, an impedance match is not necessarily
> required.
>
> When an impedance match exists, it does not necessarily mean that a
> conjugate match is established.

When a Z0-match has been established such that there are no reflections
on the transmitter's Z0 transmission line, for the same amount of power,
all the voltages, currents, and phases are identical to a conjugate match.
--
http://www.mindspring.com/~w6rca

3636. Re: Yaesu ATAS 100, out of the box - What do you need?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <reMA5.2022$uS2.158773@dfiatx1-snr1.gtei.net>
Source record: 179137

"Jason S. Hulet" <jhulet@aol.com> wrote in message
news:20000928134245.14172.00000006@ng-cp1.aol.com...
> Hello,
>
> For those of you that have them...or know... I guy orders one of these
ATAS
> 100 antennas... out of the box what will he need to get it up and running?
>
> > What sort of mount can he use? What sort of threads?
> > What sort of wiring is required?
>
>
> Thanks!
>
> Jason S. Hulet
> W1WOW

It mounts to a standard SO-238 type mount. It needs no special wiring other than the normal coax feedline, all control signals are sent from the radio via the coax. As far as mounts, it needs to be fairly strong, and it is very important that the mount presents a really good ground to the antenna. This antenna works great IF it has a good ground system. Without a good ground, or with a less than optimum ground system the performance will be disappointing.

73 de W6DKN

3637. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <yhMA5.1214$ai4.259149@news.ntplx.net>
Source record: 179138

CAM <cam2338@bigfoot.com> wrote in message
news:39D384BF.2DEE1288@bigfoot.com...

> "Ed Hare, W1RFI" wrote:

> > What "politics" would be more important than techncial issues in a
technical
> > publication?

> That's a very interesting question, Ed, and a multitude of us, who
> remember the happening, would certainly like to know the answer.

It could well be that it wasn't "political" at all, Cecil. The "politics"
do not seem to have gotten in the way of my reprinting the article series on
the TIS web pages.

Speaking of which, we are going to add Zack Lau's recent QEX piece on the
conjugate match. Until it is up on the "official" page, here it is
temporarily: (enjoy)

http://www.arrl.org/~ehare/temp/conj.pdf

73,
Ed Hare, W1RFI
ARRL Lab

3638. Re: IsoLoop and IsoTron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <TjMA5.1215$ai4.258965@news.ntplx.net>
Source record: 179139

Mr. Mister <kld68@my-deja.com> wrote:

> I asked a similar question a couple of months ago and I was refered to
> an article on the ARRL database comparing those two antennas with some
> other small antennas. If you're an ARRL member it's in the review
> section on the ARRL web site.

It is at:

http://www.arrl.org/members-only/prodrev/pdf/pr9803.pdf

73,
Ed Hare, W1RFI

3639. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <NEMA5.9959$tl2.708630@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179140

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D3868F.F8B1634@bigfoot.com...
> VE9SRB wrote:
> > For a conjugate match to exist, an impedance match is not necessarily
> > required.
> >
> > When an impedance match exists, it does not necessarily mean that a
> > conjugate match is established.
>
> When a Z0-match has been established such that there are no reflections
> on the transmitter's Z0 transmission line, for the same amount of power,
> all the voltages, currents, and phases are identical to a conjugate match.
> --
> http://www.mindspring.com/~w6rca

Your statement is correct when the transmitter output impedance is also ZO.
This is consistent with this statements in my previous posts.

If the transmitter source impedance (ZS) is not equal to ZO, more power is
delivered to load having an impedance ZS* with reflections on the line than
is to a load of ZO with no reflections on the line.

Steve

3640. Re: Tower installation publications? Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Martin Meserve <meserve@my-deja.com>
Message-ID: <39D390D5.2781E494@my-deja.com>
Source record: 179141

Zoran Brlecic wrote:
>
> First of all, I would like to apologize for off-topic posting
> on this ng which clearly deals exclusively with something
> called "fractal" antennas. I personally don't have nearly
> enough expertise to get involved in the discussions about
> lawsuits, death threats, name calling and other fractal
> stuff, so until the time I grow up, I'll refrain from posting
> again.

Most people put filters in so that they never see that stuff.
For myself, I just ignore any of the posts that have to do
with that stuff. However, don't refrain from posting. If
everybody did that, just because of the garbage, we would
miss out on a lot of good information.

>
> However, I do need some help which is tower-related (and
> as such, having nothing to do with antennas, fractal and
> nonfractal, whatsoever). This winter I'll be installing my
> first tower ever, and I'm looking for any publication that deal
> with the issue. Namely, guying, grounding, tips and tricks,
> and so on... And yes, yes, I do know about the tower-talk
> reflector, but I don't feel like subscribing to e-mail
> discussion groups. So - does anyone know if there is a
> book, brochure, website, anything out there dealing with
> tower installations? I did not find jackshi... I mean,
> anything, in the QST and CQ bookstores.
>
> Thanks and 73
>
> Zoran WA7AA

I am currently putting up my "first tower ever", a used 50 foot
Tri-Ex crankup. It is a very interesting experience. Tomorrow
I pour the cement for the footer.

Probably the best information was obtained from the guy that
I bought the tower from. You could probably go down to a
local club and ask someone to expound on his/her experiences.

Beyond that, I found the installation instructions, from the
tower manufacturer, to be very helpful. My tower doesn't require
guy wires.

Another very good source turned out to be the 1999 ARRL Antenna Handbook. They particularly cover guying and grounding information. It may not be the most complete collection of information, but it's better than nothing.

How big of a tower are you planning on putting up? I have a friend that is also installing a tower, but his is a 70 foot chankup. His doesn't require guy wires either.

Well, Good luck on your new tower. By this time tomorrow I'll be watching my cement harden.

Martin K7MEM

p.s. Do not respond directly to this post. DejaNews is re-working their E-Mail and it still has some problems. Use the address, cleverly disgusied in my sig below, if you send directly to me.

--
Martin E. Meserve K7MEM martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3641. Re: IsoLoop and IsoTron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Mr. Mister" <kld68@my-deja.com>
Message-ID: <8r06m9$j2k$1@nnrp1.deja.com>
Source record: 179142

Thanks Ed!
73

In article <TjMA5.1215$ai4.258965@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> Mr. Mister <kld68@my-deja.com> wrote:
>
> > I asked a similar question a couple of months ago and I was refered
to
> > an article on the ARRL database comparing those two antennas with
some
> > other small antennas. If you're an ARRL member it's in the review
> > section on the ARRL web site.
>
> It is at:
>
> http://www.arrl.org/members-only/prodrev/pdf/pr9803.pdf
>
> 73,
> Ed Hare, W1RFI
>
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3642. 1997 Jeep Cherokee/ATAS 100 - Which Mount???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <20000928152019.29409.00000027@ng-cq1.aol.com>
Source record: 179143

Hello,

Looking to install a ATAS 100 antenna on a 1997 Jeep Cherokee. This Cherokee has a metal hatch. Which mount, besides a mag-mount, to use for the ATAS 100 ?

Thanks for any suggestions...

Jason
W1WOW

3643. Re: Dish antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Frazier <frazier@flex.com>
Message-ID: <39D39B97.43937F0F@flex.com>
Source record: 179144

Ray:

Which Island?
Is this on a standard polar mount like a typical satellite dish used for
TV reception, or one capable of azimuth and elevation changes?

Thanks
--Rick

rcote wrote:

> This is probably not the correct NG to submit this, but is anyone
> interested in a large dish antenna? It needs to be dismantled and
> shipped at the purchaser's expense. IT is however 10 meters in
> diameter. That is about 33 feet, meshed and rotatable.
> If this is not the best group for this where can I list it?
>
> Ray in Hawaii

3644. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39D39F73.68883A22@uci.edu>
Source record: 179145

Fractenna wrote:
>
> >I haven't requested to be added to the list because I don't trust you.
> >
> >ac6xg
>
> I don't care.
>
> N1IR

Well, that's obvious, but why'd you ask?

3645. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <39D3A563.75884C64@uci.edu>
Source record: 179146

Dan K Nelson wrote:
> Yep, do what I did a long time ago, add every form of Chip, Frac, etc. that
> you can think of to your spam filter. Then you will never even see his
> posts. And if you add it as a subject line filter also, you will never see
> any of the responses to any of his posts...
>
> 73 de W6DKN

Since that's something we all need to do, wouldn't it be prudent and
efficient just to set up the newsgroup server with such a filter? :-)

73 de ac6xg

3646. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26941-39D3A3AB-41@storefull-111.iap.bryant.webtv.net>
Source record: 179147

Ed Hare, W1RFI wrote:
"Not necessarily. If one has gain, one must have directivity (so far, so good), but it is entirely possible to have directivity but no gain." (Not so good)

Ed Hare must mean no gain with respect to some reference when losses are included with the antenna`s directional gain.

Ed Laport said "---the loop antenna giving a figure-of-eight pattern---." and "The wave, or Beverage, antenna has been for many years the principal low-frequency directive antenna---."

Elsewhere, Ed Laport says directivity and gain are the same thing, resulting from constructive or destructive phase combinations caused by the antenna elements.

So, directivity and gain are as inseparable as E and H in the far field. You can`t have one without the other. The fact that loss may absorb power from a Beverage or loopstick does not eliminate its gain, though it may affect the output total from a system.

I think it is misleading to say: "it is entirely possible to have directivity without gain", especially when so many have a demonstrated misunderstanding of the connection between directivity and gain.

Best regards, Richard Harrison, KB5WZI

3647. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D3A8E6.FD7E5E78@mwci.net>
Source record: 179148

VE9SRB wrote:) there

> In any transmission line system, a conjugate match can be established at the
> output of a tuner regardless of the value of the PA output impedance. In a
> lossless system, if one establishes a conjugate match at the tuner output,
> then a conjugate match is simultaneously established at the output of the
> PA. In a lossy system this will not be the case. For example, a conjugate
> match can be established at the tuner output but a conjugate match will not
> be established at the output of the PA. In this case, maximum power is
> being delivered to the load at the tuner output but maximum power is not
> being delivered from the PA to the system. Also, in this lossy system, if
> we establish a conjugate match at the output of the PA, a conjugate match
> will not be established at the tuner output. In this case, the PA is
> delivering maximum power to the system but maximum power is not being
> delivered to the load at the tuner output. When stating that a conjugate
> match exists in a transmission line system, it is also necessary to define
> the location at which the conjugate match is said to occur.
>
> Now let's talk about impedance matching. Let's assume that we establish an
> impedance match at the output of the PA. A conjugate match will only exist
> at the output of the PA in this case if the output impedance of the PA is
> also ZO. Stated another way, establishing a conjugate match at the output
> of the PA will only result in an impedance match if the output impedance of
> the PA is ZO. This is more in line with my interpretation of your comments
> last night. In general, the existence of a conjugate match and an
> impedance match are unrelated.
>
> This is the basis of the conjugate match theorem in transmission line
> systems. In a transmission line system, more power will be delivered to a
> load that is conjugately matched than to a load that is impedance matched.
> The simultaneous existence of an impedance match and a conjugate match at
> the output of the PA requires the PA output impedance to be ZO.
>
> It is simply incorrect to state that establishing an impedance match at one
> point in a system simultaneously creates a conjugate match at another point
> in the system.

I would like to present two examples that illustrate the important ideas about impedance match and conjugate match. Please take a piece of paper and draw the diagrams that I will describe.

Draw on the paper a box, a PA with a 50+j0 ohm output impedance.

Connect to the PA a tuner. The tuner box consists of a single reactance, an ideal conventional transformer with a certain turns ratio and *possibly* a

single resistor that we will place (arbitrarily, but it can be anywhere) in series with the output terminal. At a single frequency *any* tuner can be correctly represented by these three components. All reactances are combined into a single reactance and all resistances are combined into a single resistance that accounts for all losses.

The load is 30+j40 ohms. We want the input impedance of the tuner to be 50+j0 ohms.

Assume the internal resistor is 0 ohms (the tuner is lossless). Now do the following things inside the tuner:
a) Put a -j40 ohm reactance in series with the output terminal.
b) Place a transformer with a turns ratio of 1.29:1at the input (hi-Z side toward the PA.

The PA now sees 50+j0 ohms. Consider what conjugate match means: If we stand at the tuner output and look toward the load we see 30+j40 ohms. If we turn around and look the other way into the tuner we see 30-j40 ohms. The PA 50 ohms, transformed down to 30 ohms by the transformer, in series with -j40 ohms, is the conjugate of the load.

Now let the PA output impedance be other than 50+j0 ohms, say 60+j0. If we calculate the impedance looking into the output of the tuner it is now 36-j40 ohms. No longer the conjugate of the load. But the PA still sees 50+j0, looking into the tuner input.

Conclusion: The output Z of the lossless tuner is not the conjugate of the load *unless* the PA output impedance is 50 ohms.

Next: Insert a 10 ohm resistor inside the tuner (its loss resistance) in series with the -j40 ohm reactance. Now we must modify the turns ratio to 1.12:1 so that the PA will still see 50+j0 ohms. In other words (10+30) times the square of 1.12 is 50 ohms (the load reactance is still cancelled out).

Now, looking back into the tuner output we see 50 divided 1.12 squared +10 =50 -j40 ohms. This is *not* the conjugate of the 30+j40 load.

We do not have a conjugate match at the output of the tuner, but the PA still sees 50+j0. We could modify the tuner to get a conjugate matched output but its input will not be 50+j0 ohms.

Conclusions:

(1) A conjugate match at the tuner output and a 50 ohm tuner input can be achieved simultaneously if and only if the PA is 50 ohms.

(2) If the tuner has loss, a conjugate match at the tuner output and a 50 ohm tuner input cannot be achieved simultaneously.

The Conjugate Match Theorem means exactly and precisely what it says:

"If a group of four terminal networks containing only pure reactances are arranged in tandem to connect a generator to a load, then if at any junction there is a conjugate match of impedances, there will be a conjugate match of

impedances at every other junction in the system".

We are not allowed to play any games with this. It is complete and covers all contingencies. There are no exceptions.

Bill W0IYH

3648. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D3ADB1.8B2886F7@mwci.net>
Source record: 179149

William E. Sabin wrote:

> VE9SRB wrote:) there
>
> > In any transmission line system, a conjugate match can be established at the
> > output of a tuner regardless of the value of the PA output impedance. In a
> > lossless system, if one establishes a conjugate match at the tuner output,
> > then a conjugate match is simultaneously established at the output of the
> > PA. In a lossy system this will not be the case. For example, a conjugate
> > match can be established at the tuner output but a conjugate match will not
> > be established at the output of the PA. In this case, maximum power is
> > being delivered to the load at the tuner output but maximum power is not
> > being delivered from the PA to the system. Also, in this lossy system, if
> > we establish a conjugate match at the output of the PA, a conjugate match
> > will not be established at the tuner output. In this case, the PA is
> > delivering maximum power to the system but maximum power is not being
> > delivered to the load at the tuner output. When stating that a conjugate
> > match exists in a transmission line system, it is also necessary to define
> > the location at which the conjugate match is said to occur.
> >
> > Now let's talk about impedance matching. Let's assume that we establish an
> > impedance match at the output of the PA. A conjugate match will only exist
> > at the output of the PA in this case if the output impedance of the PA is
> > also ZO. Stated another way, establishing a conjugate match at the output
> > of the PA will only result in an impedance match if the output impedance of
> > the PA is ZO. This is more in line with my interpretation of your comments
> > last night. In general, the existence of a conjugate match and an
> > impedance match are unrelated.
> >
> > This is the basis of the conjugate match theorem in transmission line
> > systems. In a transmission line system, more power will be delivered to a
> > load that is conjugately matched than to a load that is impedance matched.
> > The simultaneous existence of an impedance match and a conjugate match at
> > the output of the PA requires the PA output impedance to be ZO.
> >
> > It is simply incorrect to state that establishing an impedance match at one
> > point in a system simultaneously creates a conjugate match at another point
> > in the system.
>
> I would like to present two examples that illustrate the important ideas about
> impedance match and conjugate match. Please take a piece of paper and draw the
> diagrams that I will describe.
>
> Draw on the paper a box, a PA with a 50+j0 ohm output impedance.

>
> Connect to the PA a tuner. The tuner box consists of a single reactance, an
> ideal conventional transformer with a certain turns ratio and *possibly* a
> single resistor that we will place (arbitrarily, but it can be anywhere) in
> series with the output terminal. At a single frequency *any* tuner can be
> correctly represented by these three components. All reactances are combined
> into a single reactance and all resistances are combined into a single
> resistance that accounts for all losses.
>
> The load is 30+j40 ohms. We want the input impedance of the tuner to be 50+j0
> ohms.
>
> Assume the internal resistor is 0 ohms (the tuner is lossless). Now do the
> following things inside the tuner:
> a) Put a -j40 ohm reactance in series with the output terminal.
> b) Place a transformer with a turns ratio of 1.29:1at the input (hi-Z side
> toward the PA.
>
> The PA now sees 50+j0 ohms. Consider what conjugate match means: If we stand at
> the tuner output and look toward the load we see 30+j40 ohms. If we turn around
> and look the other way into the tuner we see 30-j40 ohms. The PA 50 ohms,
> transformed down to 30 ohms by the transformer, in series with -j40 ohms, is the
> conjugate of the load.
>
> Now let the PA output impedance be other than 50+j0 ohms, say 60+j0. If we
> calculate the impedance looking into the output of the tuner it is now 36-j40
> ohms. No longer the conjugate of the load. But the PA still sees 50+j0, looking
> into the tuner input.
>
> Conclusion: The output Z of the lossless tuner is not the conjugate of the load
> *unless* the PA output impedance is 50 ohms.
>
> Next: Insert a 10 ohm resistor inside the tuner (its loss resistance) in series
> with the -j40 ohm reactance. Now we must modify the turns ratio to 1.12:1 so
> that the PA will still see 50+j0 ohms. In other words (10+30) times the square
> of 1.12 is 50 ohms (the load reactance is still cancelled out).
>
> Now, looking back into the tuner output we see 50 divided 1.12 squared +10 =50
> -j40 ohms. This is *not* the conjugate of the 30+j40 load.
>
> We do not have a conjugate match at the output of the tuner, but the PA still
> sees 50+j0. We could modify the tuner to get a conjugate matched output but its
> input will not be 50+j0 ohms.
>
> Conclusions:
>
> (1) A conjugate match at the

lossless

> tuner output and a 50 ohm tuner input can be
> achieved simultaneously if and only if the PA is 50 ohms.
>
> (2) If the tuner has loss, a conjugate match at the tuner output and a 50 ohm
> tuner input cannot be achieved simultaneously.
>
> The Conjugate Match Theorem means exactly and precisely what it says:
>
> "If a group of four terminal networks containing only pure reactances are
> arranged in tandem to connect a generator to a load, then if at any junction
> there is a conjugate match of impedances, there will be a conjugate match of
> impedances at every other junction in the system".
>
> We are not allowed to play any games with this. It is complete and covers all
> contingencies. There are no exceptions.
>
> Bill W0IYH

3649. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <03OA5.1216$ai4.266933@news.ntplx.net>
Source record: 179150

Richard Harrison <richardharrison@webtv.net> wrote:

> Ed Hare, W1RFI wrote:

> "Not necessarily. If one has gain, one must have directivity (so far, so
> good), but it is entirely possible to have directivity but no
> gain." (Not so good)

> Ed Hare must mean no gain with respect to some reference when losses are
> included with the antenna`s directional gain.

Is that not part of the definition of directivity? From the ARRL Antenna Book, 18th edition (N6BV), Eq 5 from Chapter 2:

D = P / Pav where D is the directivity, P is the power density at its maximum point on the surface of a sphere and Pav is the average power density on the surface of the sphere. If the antenna is inefficient, both P and Pav will be reduced by the same amount, so it can still have directivity.

Gain is defined:

G = eff * D

So an inefficient antenna (ie, loopstick) can have directivity, but no gain.

73,
Ed Hare, W1RFI

3650. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26941-39D3A810-46@storefull-111.iap.bryant.webtv.net>
Source record: 179151

Cecil, W6RCA wrote:
"You obviously mean a resistance which is large compared to the generator source impedance."

Actually, I meant a large resistance when compared with the voltage available from the generator. The current through the resistance must then be small. If an infinite voltage is available all bets are off!

Best regards, Richard Harrison, KB5WZI

3651. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39d39f20.437564@news.mcn.org>
Source record: 179152

On Thu, 28 Sep 2000 13:40:45 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>Dan Richardson <k6mhe@arrl.net> wrote:
[snip]
>
>> If I am to assume by your statements that the decision to remove
>> "Reflections" from publication was due to level of sales then I'll ask
>> you this question.
>
>I don't know what all the factors were that ended up in the discontinuance
>of the Reflections book, Dan. But I rather expect that if the sales volume
>was high, the book would not have been discontinued.

I don't know the figures so really can't offer a factual opinion, but
that said, it seems to me that I have never before, in my 45+ years in
amateur radio, seen such a clamor for copies of an "out of print"
amateur radio book that has been generated by "Reflections".

>
>> Why were Walter's writings, which were many, deleted from the ARRL
>> Antenna Book and ARRL Handbook at about the same time? It seems to me,
>> and I think some others on the news group, that such actions certainly
>> appear to be more political than technical.
>
>What "politics" would be more important than techncial issues in a technical
>publication? If the editors chose to use what they felt was better
>material, in what way would that be "political?" What political advantage
>do you believe that ARRL would have gained by not publishing the material?

As I said before, I have formed my opinion based upon the fact that
just about everything Walter had contributed was purged from the
other ARRL publications at about the same time... The only gain I
can think of is that someone's ego was involved. It has been by
experience that is the case with most corporate & organizational
political decisions. I really don't believe that decision was made by
the ARRL as a whole, because, overall that decision was not (in my
opinion) beneficial to the ARRL nor amateur radio community.

Granted a belief is a belief and I can't "prove" anything, however,
it is based upon (questionable?) actions that I have observed.

>
>> Would you care to comment?
>
>Most comments I could make would be outside the scope of my role at ARRL HQ,

>Dan, but there was no objection to the ARRL Tech Info Service reprinting
>Walt's QST series on the ARRL Web pages.
>
>73,
>Ed Hare, W1RFI
>

Ed,

Really admire your responding. I only wish you could respond outside
you role at ARRL HQ, but understand your choosing not to do so.

vry 73
Danny

3652. Re: RFI in in-wall speakers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <39D3B6A1.BBC0ED29@tpi.net>
Source record: 179153

Jeffrey,
I would recommend ferrite beads on all leads that enter and leave the amplifier, including the power (line) leads. If this doesn't work, try a balanced line filter as is used on most electronic equipment these days. You may have to put a lowpass filter on the audio output leads. Make sure the amplifier chassis is grounded. All filtering should be done at the amplifier.
Hope this helps, best wishes from ray w6fya
Jeffrey Steinberg wrote:

> I have some major RFI coming from my atic-mounted dipole (about 25 feet
> away from home theater). After some suggestions I put some Palomar
> RFI beads (actually the split beads) around the speaker wires (monster-brand)
> right after they exit the stereo.
>
> Question: The speaker runs are quite long. Do I need to add more beads at the
> stereo end? If I do, will I still get it, and if so will puting them at the
> speaker ends (in the wall) help? The speakers are B&W large in-wall speakers
> (not sure of model number).
>
> I am considering a tripod mounted beam antenna that will raise the antenna
> another 10 to 15 feet from the dipole. Will that help much or still too close.
>
> Thanks. Running only 100-150 watts.
>
> --jeffrey steinberg, kc2guc

3653. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <SOOA5.3634$7I4.203513@bgtnsc04-news.ops.worldnet.att.net>
Source record: 179154

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39D3A8E6.FD7E5E78@mwci.net...
>
>
> I would like to present two examples that illustrate the important ideas
about
> impedance match and conjugate match. Please take a piece of paper and
draw the
> diagrams that I will describe.
>
> Draw on the paper a box, a PA with a 50+j0 ohm output impedance.
>

Hi Bill:

Not sure if this was meant specifically for me but I'll give it a go.

I'm okay so far.

> Connect to the PA a tuner. The tuner box consists of a single reactance,
an
> ideal conventional transformer with a certain turns ratio and *possibly* a
> single resistor that we will place (arbitrarily, but it can be anywhere)
in
> series with the output terminal. At a single frequency *any* tuner can be
> correctly represented by these three components. All reactances are
combined
> into a single reactance and all resistances are combined into a single
> resistance that accounts for all losses.
>
> The load is 30+j40 ohms. We want the input impedance of the tuner to be
50+j0
> ohms.
>

For an *impedance* match.

> Assume the internal resistor is 0 ohms (the tuner is lossless). Now do the
> following things inside the tuner:
> a) Put a -j40 ohm reactance in series with the output terminal.
> b) Place a transformer with a turns ratio of 1.29:1at the input (hi-Z side
> toward the PA.
>
> The PA now sees 50+j0 ohms. Consider what conjugate match means: If we
stand at
> the tuner output and look toward the load we see 30+j40 ohms. If we turn

around
> and look the other way into the tuner we see 30-j40 ohms. The PA 50 ohms,
> transformed down to 30 ohms by the transformer, in series with -j40 ohms,
is the
> conjugate of the load.
>

okay.

> Now let the PA output impedance be other than 50+j0 ohms, say 60+j0. If
we
> calculate the impedance looking into the output of the tuner it is now
36-j40
> ohms. No longer the conjugate of the load. But the PA still sees 50+j0,
looking
> into the tuner input.
>
> Conclusion: The output Z of the lossless tuner is not the conjugate of
the load
> *unless* the PA output impedance is 50 ohms.
>

The "*unless* the PA output impedance is 50 ohms" statement is only specific to the condition that a conjugate match at the tuner output AND an impedance match at the tuner input both exist simultaneously. I think if you read my discussion again you may find that we do not disagree as much as I perceive you think we do. If we are interested in achieving a conjugate match we can do so regardless of the PA output impedance. We just will not have an impedance match in the system.

Change the load to 36 + j40 ohms and we now have a conjugate match at the tuner output with the PA not being 50 ohms. All consistent with the conjugate match theorem. We can still establish a conjugate match *at* the tuner output. We need to define the point in the system where we want to create the conjugate match, i.e. at the point where we define the system "load".

> Next: Insert a 10 ohm resistor inside the tuner (its loss resistance) in
series
> with the -j40 ohm reactance. Now we must modify the turns ratio to 1.12:1
so
> that the PA will still see 50+j0 ohms. In other words (10+30) times the
square
> of 1.12 is 50 ohms (the load reactance is still cancelled out).
>
> Now, looking back into the tuner output we see 50 divided 1.12 squared +10
=50
> -j40 ohms. This is *not* the conjugate of the 30+j40 load.
>
> We do not have a conjugate match at the output of the tuner, but the PA
still
> sees 50+j0. We could modify the tuner to get a conjugate matched output

but its
> input will not be 50+j0 ohms.
>

I agree.

>
> Conclusions:
>
> (1) A conjugate match at the tuner output and a 50 ohm tuner input can be
> achieved simultaneously if and only if the PA is 50 ohms.

and the tuner is lossless.

>
> (2) If the tuner has loss, a conjugate match at the tuner output and a 50
ohm
> tuner input cannot be achieved simultaneously.

Correct.

>
> The Conjugate Match Theorem means exactly and precisely what it says:
>
> "If a group of four terminal networks containing only pure reactances are
> arranged in tandem to connect a generator to a load, then if at any
junction
> there is a conjugate match of impedances, there will be a conjugate match
of
> impedances at every other junction in the system".
>

Yes, I think if you review my discussion you will note that I said this.

Also, if there are losses in the system, establishing a conjugate match at one point does not establish a conjugate match at everypoint. Also, establishing an impedance match at one point does not necessarily establish a conjugate match at any point.

>
> We are not allowed to play any games with this. It is complete and covers
all
> contingencies. There are no exceptions.
>
> Bill W0IYH
>
>
>

3654. Re: BETTER than the MI2 Fractal Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928173600.22305.00000062@ng-da1.aol.com>
Source record: 179155

>
>
>Fractenna wrote:
>>
>> >I haven't requested to be added to the list because I don't trust you.
>> >
>> >ac6xg
>>
>> I don't care.
>>
>> N1IR
>
>Well, that's obvious, but why'd you ask?
>
>

Ask what?

NC

3655. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928173923.22305.00000063@ng-da1.aol.com>
Source record: 179156

>I know I'll be sorry for getting involved in this pissing contest,
>but why not just do your best in the 10-meter contest, submit your
>score, and let everybody look in QST and see how well you did?
>Don't worry about what Yuri does or doesn't do.
>
>73,
>Bob
>

I intend to.

Yuri has maintained, for some time, that the 10M FQY seen on the ham page of

http://www.fractenna.com

is a very poor antenna and a fraud. He even told this to a New York Times reporter in July 1999. This is despite the antenna is well documented as the best option for its size; highly efficient; very good in performance; easy to build; and reliable.

If this were true, then he would have no problem whatsoever in beating me.

But its not true; I am a very good contest operator; and I will beat the panst off of him.

73
Chip N1IR

3656. PRESS RELEASE: NEW ANTENNA BETTER THAN FRACTAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: n8wwm@aol.com
Message-ID: <20000928175134.22441.00000065@ng-da1.aol.com>
Source record: 179157

FOR IMMEDIATE RELEASE:

Independent lab reports confirm that CANTENNA <tm> outperforms Fractal.

One scientist at the lab, after extensive testing, was heard to exclaim "But isn't a CANTENNA<tm> a dummy load?"

To clarify things...let us just say that yes, a CANTENNA<tm> IS a dummy load. However it has been suggested that the same term could be applied to a nocturnal emission from Chip.

3657. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D3BED2.35D9BCB2@eznec.com>
Source record: 179158

I disagree somewhat with both you gentlemen, although I think you're largely trying to say the same thing, and my disagreement is likely due simply to lack of precision in your statements.

I don't much like Ed's statement that an antenna can have "no gain", and at least an implication that it's possible to have no directivity. Every antenna has gain compared to something. An antenna can certainly have a negative gain relative to an isotropic source (i.e., a gain which is a negative dBi value), which is probably what Ed means.

I disagree with Richard Harrison's statement (quoting or paraphrasing LaPorte) that directivity and gain are the same thing. As Ed has pointed out, they differ by the efficiency. I don't have LaPorte, but all other references I have make this distinction; I'll be glad to give page and equation numbers if anyone is interested.

All antennas have directivity, which is simply the ratio to the maximum radiation intensity (radiated field power density) to the average radiation intensity. The directivity of an isotropic antenna is 1. All other antennas have greater directivity, and this doesn't depend on an antenna's efficiency. For example, half wave dipoles made from a perfect conductor and from an extremely lossy conductor have the same directivity (1.64).

Let's consider a 100% efficient antenna in free space. If it spreads its signal equally in all directions, its gain is 0 dBi in all directions. But only an isotropic source, by definition, has this pattern. If a 100% efficient antenna distributes its radiated power in any other way, it will have greater than 0 dBi gain in some direction(s) and less in others. Considering the "gain" to be the gain in the strongest direction, any 100% efficient antenna in free space except an isotropic source must have a positive gain relative to an isotropic source (that is, the gain is greater than 0 dBi). A 100% efficient half wave dipole, for example, has a gain in dBi of 10 * log(directivity) = 10 * log(1.64) = 2.15 dBi.

As I mentioned above, reducing the efficiency doesn't affect directivity, so a 50% efficient dipole still has a directivity of 1.64. But the gain is 3 dB less than before, or 2.15 - 3.01 = -0.86 dBi. (I used the more precise 3.01 dB so the answer would agree with the next calculation.) You can also calculate this using the relationship between directivity and gain which Ed gave, or gain in dBi = 10 * log(directivity * efficiency) = 10 * log(1.64 * 0.5) = -0.86 dBi. I'm sure this is what Ed means by an antenna with "directivity but no gain". I'd rather say it has directivity (as do all antennas), and a gain less than 0 dBi.

Roy Lewallen, W7EL

"Ed Hare, W1RFI" wrote:
>
> Richard Harrison <richardharrison@webtv.net> wrote:
>
> > Ed Hare, W1RFI wrote:
>
> > "Not necessarily. If one has gain, one must have directivity (so far, so
> > good), but it is entirely possible to have directivity but no
> > gain." (Not so good)
>
> > Ed Hare must mean no gain with respect to some reference when losses are
> > included with the antenna`s directional gain.
>
> Is that not part of the definition of directivity? From the ARRL Antenna
> Book, 18th edition (N6BV), Eq 5 from Chapter 2:
>
> D = P / Pav where D is the directivity, P is the power density at its
> maximum point on the surface of a sphere and Pav is the average power
> density on the surface of the sphere. If the antenna is inefficient, both P
> and Pav will be reduced by the same amount, so it can still have
> directivity.
>
> Gain is defined:
>
> G = eff * D
>
> So an inefficient antenna (ie, loopstick) can have directivity, but no gain.
>
> 73,
> Ed Hare, W1RFI

3658. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D3BEB1.51DCFA96@mwci.net>
Source record: 179159

VE9SRB wrote:

> "William E. Sabin" <sabinw@mwci.net> wrote in message
> news:39D3A8E6.FD7E5E78@mwci.net...
> >
> >
> > I would like to present two examples that illustrate the important ideas
> about
> > impedance match and conjugate match. Please take a piece of paper and
> draw the
> > diagrams that I will describe.
> >
> > Draw on the paper a box, a PA with a 50+j0 ohm output impedance.
> >
>
> Hi Bill:
>
> Not sure if this was meant specifically for me but I'll give it a go.
>
> I'm okay so far.
>
> > Connect to the PA a tuner. The tuner box consists of a single reactance,
> an
> > ideal conventional transformer with a certain turns ratio and *possibly* a
> > single resistor that we will place (arbitrarily, but it can be anywhere)
> in
> > series with the output terminal. At a single frequency *any* tuner can be
> > correctly represented by these three components. All reactances are
> combined
> > into a single reactance and all resistances are combined into a single
> > resistance that accounts for all losses.
> >
> > The load is 30+j40 ohms. We want the input impedance of the tuner to be
> 50+j0
> > ohms.
> >
>
> For an *impedance* match.
>
> > Assume the internal resistor is 0 ohms (the tuner is lossless). Now do the
> > following things inside the tuner:
> > a) Put a -j40 ohm reactance in series with the output terminal.
> > b) Place a transformer with a turns ratio of 1.29:1at the input (hi-Z side
> > toward the PA.

> >
> > The PA now sees 50+j0 ohms. Consider what conjugate match means: If we
> stand at
> > the tuner output and look toward the load we see 30+j40 ohms. If we turn
> around
> > and look the other way into the tuner we see 30-j40 ohms. The PA 50 ohms,
> > transformed down to 30 ohms by the transformer, in series with -j40 ohms,
> is the
> > conjugate of the load.
> >
>
> okay.
>
> > Now let the PA output impedance be other than 50+j0 ohms, say 60+j0. If
> we
> > calculate the impedance looking into the output of the tuner it is now
> 36-j40
> > ohms. No longer the conjugate of the load. But the PA still sees 50+j0,
> looking
> > into the tuner input.
> >
> > Conclusion: The output Z of the lossless tuner is not the conjugate of
> the load
> > *unless* the PA output impedance is 50 ohms.
> >
>
> The "*unless* the PA output impedance is 50 ohms" statement is only specific
> to the condition that a conjugate match at the tuner output AND an impedance
> match at the tuner input both exist simultaneously.

That is exactly what I said also, and have said many times previously. There is not a nickel's difference between your conclusions and mine. My goal was to use very simple examples to illustrate the basic principles of this entire conjugate match problem.

It's interesting how simple concepts can be smothered with rhetoric that does more to confuse than to enlighten.

> I think if you read my
> discussion again you may find that we do not disagree as much as I perceive
> you think we do. If we are interested in achieving a conjugate match we can
> do so regardless of the PA output impedance. We just will not have an
> impedance match in the system.
>
> Change the load to 36 + j40 ohms and we now have a conjugate match at the
> tuner output with the PA not being 50 ohms. All consistent with the
> conjugate match theorem. We can still establish a conjugate match *at* the
> tuner output. We need to define the point in the system where we want to
> create the conjugate match, i.e. at the point where we define the system
> "load".
>

> > Next: Insert a 10 ohm resistor inside the tuner (its loss resistance) in
> series
> > with the -j40 ohm reactance. Now we must modify the turns ratio to 1.12:1
> so
> > that the PA will still see 50+j0 ohms. In other words (10+30) times the
> square
> > of 1.12 is 50 ohms (the load reactance is still cancelled out).
> >
> > Now, looking back into the tuner output we see 50 divided 1.12 squared +10
> =50
> > -j40 ohms. This is *not* the conjugate of the 30+j40 load.
> >
> > We do not have a conjugate match at the output of the tuner, but the PA
> still
> > sees 50+j0. We could modify the tuner to get a conjugate matched output
> but its
> > input will not be 50+j0 ohms.
> >
>
> I agree.
>
> >
> > Conclusions:
> >
> > (1) A conjugate match at the tuner output and a 50 ohm tuner input can be
> > achieved simultaneously if and only if the PA is 50 ohms.
>
> and the tuner is lossless.
>
> >
> > (2) If the tuner has loss, a conjugate match at the tuner output and a 50
> ohm
> > tuner input cannot be achieved simultaneously.
>
> Correct.
>
> >
> > The Conjugate Match Theorem means exactly and precisely what it says:
> >
> > "If a group of four terminal networks containing only pure reactances are
> > arranged in tandem to connect a generator to a load, then if at any
> junction
> > there is a conjugate match of impedances, there will be a conjugate match
> of
> > impedances at every other junction in the system".
> >
>
> Yes, I think if you review my discussion you will note that I said this.
>
> Also, if there are losses in the system, establishing a conjugate match at

> one point does not establish a conjugate match at everypoint. Also,
> establishing an impedance match at one point does not necessarily establish
> a conjugate match at any point.
>
> >
> > We are not allowed to play any games with this. It is complete and covers
> all
> > contingencies. There are no exceptions.
> >
> > Bill W0IYH

3659. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: X@Y.Z.net
Message-ID: <slrn8t7fqh.fb4.X@animas.frontier.net>
Source record: 179160

Hey! Another Jones! kewl.

On Thu, 28 Sep 2000 01:38:43 -0500, Mark Keith scribbled:
>Wayne Jones wrote:
>>
>> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
>> be against my house and the other will be close to and guyed from the corner
>> of my back fence.
>
>Conduit is pretty flimsy. I'd rather use the fence top rail sections
>they sell for chain link fences. The only problem is you can telescope.
>But they are swaged at the end to be able to hook together. I have 20 ft
>worth supporting a 10m vertical right now. 20 ft is real easy to put up,
>but 30 ft is hard for one person. You would need a helper to help pull

I can recommend this. For Field Day I built 2 phased verticals
(32' ea.) out of top rail pipe. I used 2 sections on each vertical
and another 2' piece I install at the base after it's all erected
which tightens up the guy wires. I used a 'modified 3-way set of
guys (woven nylon) at about 20': 2 each on the outer ends of the
array, and 1 vertical-to-vertical guy to make up the other 2 inside guys.
Of course, I use "FD Construction, so I would use something other
than nylon rope in a permanent installation.

It is, at least, a 2-person erection -- no more than 3.
Think it through ahead of time and it'll go up smoothly.

For the base, I'd use a technique that I use for my 40' tower:
Design a 1 or 2 feet square, HEAVY guage steel plate with a small
pipe stub welded in the center to permit the vertical to slip over.
On the other side weld 2 or 3 steel spikes (as long as you can
'handle':) and drive the sucker into the ground.
You could even lay sod over it to minimise the 'appearance'.
You're only going to use the base to keep the vertical from
sinking into the ground _and_ to keep it from sliding from
side-to-side. You use the guys to hold it up.

(For FD, I use a set of 1 foot square, thick nylon blocks which
insulate the verticals, and which I bought 'surplus' for $5 each,
and for which the U.S. Taxpayer probably paid $500 each.)

With what you are seeking, I don't see why you should'nt end up
with a 2-el phased 40M vertical in the bargin!

Let me tell you: Late on Saturday night/0'dark:30 on Sunday morning,
that antenna is MONDO! I achieve *incredible* DX-style pile-ups with

just 100W from here in the Colorado Rockies. I REALLY wish I could
put one up here at the home QTH -- maybe I could for 30M....

Ain't it just like a ham to start an antenna project with Winter
coming on? HI!HI!

Good Luck es "gud dx",
Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

3660. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a0bb2b7.537468118@news.seanet.com>
Source record: 179161

On Wed, 27 Sep 2000 21:06:36 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:
>Hi Richard:
>
>In discussing this subject previously on the NG, Cecil and I went through a
>few rounds of somewhat inappropriate posts. Both of us being equally
>responsible in this regard. In looking at some of Cecil's other posts here
>and elsewhere, I have come to appreciate his humor and understand his method
>of engaging in a discussion better. Had I understood this better in the
>earlier discussion, I think I could have avoided fanning the flames from my
>end.
>
>>
>> Would you care to enunciate how loss makes a difference to the
>> question of conjugation? Simply stating
>> >This issue comes down to understanding theory more than practical
>reality.
>> cannot (without very careful crafting) disengage the two.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>I will address this issue relative to Walt's and my QEX letters. I may
>suggest a few exercises to the students at home who are really interested in
>the subject.
>
>It is a given that a "conjugate match" exists when maximum power is being
>delivered from a fixed source to an adjustable load. The first point to
>make is that we must identify an arbitrary location in the transmission line
>system where the conjugate match is defined to occur. For now, let's define
>it at the output terminals of the transmitter. When the load
>impedance connected at the terminals of the transmitter is adjusted such
>that maximum power is being delivered from the transmitter to the load, the
>load impedance will be the conjugate of the transmitter's output impedance.
>By definition, for maximum power transfer, the impedance looking to the
>right from our arbitrary point must be the complex conjugate of the
>impedance looking to the left from the same point. Note that one impedance
>is determined looking in the forward direction and the other is determined
>looking in the rearward direction. The forward impedance would be measured
>by connecting an analyzer to the transmission line input and the rearward
>impedance would be measured by connecting an analyzer to the transmitter
>output terminals (not recommended unless you don't need that analyzer
>anymore). Calculation of the impedances is performed in a similar manner.
>

Actually, your jest of placing an analyzer at the transmitter output terminals is something that I have done (key-down too). The trick was to disconnect the exciter before keying down. This switches the amp into the path and the idle state Z was easily determined.

For those who mumble about feedback and such, this is the perfect test of that mechanism and the validity of their suppositions (not that I validated THEIRS but rather mine).

Of course this says nothing about the Z of the transmitter when it is actually sourcing power, but it does establish a baseline. Few in these discussions have presented any method to make such a determination, and in consequence have spilled a lot of ink (in the form of bits) speculating about possibilities.
>
>In a lossless transmission line system, a conjugate match established at one
>point in the system established a conjugate match at every point in the
>system.
>
The qualification of lossless is correct, and by the book. It may prove to be unwarranted.
>
>In a transmission line system with loss, a conjugate match can be
>established at any point in the system. However, establishing a conjugate
>match at any one point in a lossy system does not establish a conjugate
>match at every point in the system.
>
And here we go....

This I must presume is the beginning and end of it. If we are to stick by the book, then the debate is over. And yet it seems that "by the book" is unsatisfying for some.
>
>Now, let's relate these concepts to the discussion of the lossy T-network.
>The issue is simply the following, does creating an impedance match at the
>input terminals of the lossy T-network immediately establish the existence
>of a conjugate match at the T-network output. Stated another way, does
>establishing an impedance match at the T-network input create the condition
>of maximum power transfer to the load connected at the T-network output?
>
Here again, is a presumption that could lead to complications.

The conjugate is felt throughout the system in some form or another. The conjugate, I would challenge is not found conveniently at one connector or another. This is too facile.

When I served at the bench performing RF Power and attenuation calibration, we spoke of the Plane of the Source, the Plane of Measurement and the Plane of the Load. For this subject we might refer to the Plane of Conjugation. This is what you are referring to after a fashion. The Plane of Conjugation is not going to occur at a convenient connection, but I doubt if this matters much to your

perception of the problem.
>
>Establishing a ZO impedance match at the T-network input will establish a
>conjugate match at the T-network input if the impedance seen looking
>rearward towards the transmitter from the T-network input is also ZO.
>However, a conjugate match will not be established at the T-network output.
>To establish a conjugate match at the T-network output, the impedance
>looking forward from the T-network output must be the complex conjugate of
>the impedance seen looking rearward into the T-network output. A conjugate
>match can be established at the T-network output through component value
>adjustment but an impedance match will not exist at the T-network input.
>Proof of these statements
>requires more time than available in this post. I would be pleased to send
>info to anyone interested or provide it in a later post.
>
My problem with most posting to this topic are few separate or are
aware there are many forms of matching. I see two discussed above,
the ZO (or ZL) Match and the Conjugate Match. They are not the same.
NBS established that you must choose a Basis of the match and you
cannot mix the two in determination (or discussion).
>
>The implication of the statements in the preceding paragraph is that more
>power can be delivered to a load at the lossy T-network output with a
>mismatch at
>the T-network input than with a match at the T-network input. This can be
>verified through measurement or calculation. Connect a somewhat high SWR
>load to your
>tuner and establish an impedance match at the network input. (A load with
>an R less than Zo works best as more loss will develop in the tuner).
>Measure the forward and reflected power at the tuner output. The power
>delivered to the transmission line is Pforward - Preflected. Now adjust the
>tuner components for maximum forward power in the transmission line. In
>this case more power is delivered to the transmission line (maximum power
>hence the CM) but an impedance match will not exist at the tuner input.
>This measurement may be difficult depending on the losses in the tuner (the
>lossier the better for illustration) and the resolution of your power meter.
>Mathematical proof of these concepts will be provided in a later post.
>
>As for the impedance calculations described in the QEX letters, here's a
>simple
>exercise:
>
>Assume the load at the tuner output is 150 + j50 ohms. Now design your own
>lossy T-network circuit (pick some reasonably low Q's) to achieve a 50 ohm
>matched input impedance at the T-network input. Next, use the method
>described by Walt to determine the T-network output impedance. It should
>calculate the output impedance to be 150 - j50 ohms. Next, adjust the
>component values (keeping Q constant) to change the input impedance to any
>other purely resistive value. An impedance match will no longer exist but
>now calculate the T-network output impedance using Walt's methods.

>
>73,
>Steve VE9SRB
>
>In the interest of open exchange, anyone in contact with Walt can forward
>this message to him.
>

Hi Steve,

In response to the simple test you outline above, I would say that being ignorant of Walt's method, that I cannot effectively respond except by generalities. I would also point out that I made many attempts to find what Basis Walt was interested in, but he never responded. I presume this was simply my inability to effectively describe the NBS's usage of the term Basis.

I did observe in his writings though, that he freely crossed from one Basis to the other. Thus I could not accept his tenets; and even though I found that I could agree to them by parts, I could not agree to them as a whole. This problem of parts also inhabits your discussion here, and for like reason, I cannot subscribe wholly to what is said.

It seems to me that your argument must stand with the arbitrary isolation of resistances and reactances "within" the source or "within" the tuner (or load for that matter). Systems don't work by parts, that's why we (in the calibration field) refer to the various planes. Those planes are specific, as specific as your connectors, but they contain no preconceived notions of exhibiting pure or impure mathematical concepts of conjugation (there are too many variables that invalidate that presumption).

In my RF Power determinations, I flattened the line at both the source and the load. The absolute best SWR I have ever obtained was 1:1.005. So appeals to perfection are lost on me as flights of fantasy. Every System has irreducible SWR, but that does not make the measure of SWR, or the flattening of a load impossible - you simply do your best on the basis of approaching a perfect solution. If you reject the notion of this perfect solution, you are in danger of rejecting effective methods of accomplishing what you set out to do.

This problem of Conjugation is not nearly as difficult as the problem of the Uncertainty of Mismatch. I have attempted to educate this group of that problem on a couple occasions, but it was roundly rejected or thoroughly ignored (same thing really). In reality this topic is simply too difficult to observe when Power determination is dominated by inaccuracy that swamps it (most Hams do not have the resources to resolve this issue because their equipment is typically very poor - even pro's suffer for the same reason).

Forgive me for introducing yet another topic - in fact neither
actually intrude into the reality of the Ham's daily operations in any
meaningful way (until they enter a Shoot-Out).

73's
Richard Clark, KB7QHC

3661. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D3BE78.195360C8@bigfoot.com>
Source record: 179162

VE9SRB wrote:
> Your statement is correct when the transmitter output impedance is also ZO.

It's also true when the transmitter output impedance is not Z0.
For the *same amount of power into the same Z0-matched line*, all the
voltages, currents, and phases outside of the transmitter will be
identical to a conjugate match. For instance:

50 ohm/100w XMTR---50 ohm coax---+---1/2WL 300 ohm line---50 ohm load

20 ohm/100w XMTR---50 ohm coax---+---1/2WL 300 ohm line---50 ohm load

Each 100w transmitter will see a 50 ohm load with no reflections. Without
knowing the output impedances of the transmitters, there is no way to
tell which is the conjugate match because all external measurements of
voltage, current, and phase yield identical results. Both transmitters
are delivering 70.7 volts at 1.4 amps. Both systems are Z0-matched.
--
http://www.mindspring.com/~w6rca

3662. VHF/UHF Ham/Business Band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Crocker <bcrocker@home.com>
Message-ID: <tnPA5.13754$hD4.3588546@news1.rdc1.mi.home.com>
Source record: 179163

Are most base, dual-band antennas designed for Ham radio, close enough to be used for the VHF/UHF business bands? Or should I buy an antenna designed for those bands?

Thanks,
Bill Crocker

3663. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D3C0DE.7BA3378E@bigfoot.com>
Source record: 179164

"William E. Sabin" wrote:
> (1) A conjugate match at the tuner output and a 50 ohm tuner input can be
> achieved simultaneously if and only if the PA is 50 ohms.

How about a Z0-match?

Consider the two following systems:

50ohm/100w XMTR---50 ohm coax---+----1/2WL 300 ohm line-----50 ohm load

20ohm/100w XMTR---50 ohm coax---+----1/2WL 300 ohm line-----50 ohm load

Conditions external to the XMTRs are *IDENTICAL* yet one is conjugately
matched and one is not? If so, what good is a conjugate match if it causes
nothing different to occur in reality? The two systems above are Z0-matched
and, neglecting losses, that seems good enough to get the identical amounts
of power to the loads with 70.7 volts and 1.4 amps. Z0-matches seem to be
the important thing to hams, not conjugate matches.
--
http://www.mindspring.com/~w6rca

3664. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <3DPA5.10075$tl2.718622@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179165

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D3BE78.195360C8@bigfoot.com...
> VE9SRB wrote:
> > Your statement is correct when the transmitter output impedance is also
Z0.
>
> It's also true when the transmitter output impedance is not Z0.
> For the *same amount of power into the same Z0-matched line*, all the
> voltages, currents, and phases outside of the transmitter will be
> identical to a conjugate match. For instance:
>
> 50 ohm/100w XMTR---50 ohm coax---+---1/2WL 300 ohm line---50 ohm load
>
> 20 ohm/100w XMTR---50 ohm coax---+---1/2WL 300 ohm line---50 ohm load
>
> Each 100w transmitter will see a 50 ohm load with no reflections. Without
> knowing the output impedances of the transmitters, there is no way to
> tell which is the conjugate match because all external measurements of
> voltage, current, and phase yield identical results. Both transmitters
> are delivering 70.7 volts at 1.4 amps. Both systems are Z0-matched.
> --
> http://www.mindspring.com/~w6rca

Cecil:

Looking at it from that perspective, I would have to agree. I wonder what
the internal power dissipation is in each case? (ha)

Thanks,

Steve

3665. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <xFPA5.10077$tl2.717281@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179166

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D3C0DE.7BA3378E@bigfoot.com...
> "William E. Sabin" wrote:
> > (1) A conjugate match at the tuner output and a 50 ohm tuner input can
be
> > achieved simultaneously if and only if the PA is 50 ohms.
>
> How about a Z0-match?
>
> Consider the two following systems:
>
> 50ohm/100w XMTR---50 ohm coax---+----1/2WL 300 ohm line-----50 ohm load
>
> 20ohm/100w XMTR---50 ohm coax---+----1/2WL 300 ohm line-----50 ohm load
>
> Conditions external to the XMTRs are *IDENTICAL* yet one is conjugately
> matched and one is not? If so, what good is a conjugate match if it causes
> nothing different to occur in reality? The two systems above are
Z0-matched
> and, neglecting losses, that seems good enough to get the identical
amounts
> of power to the loads with 70.7 volts and 1.4 amps. Z0-matches seem to be
> the important thing to hams, not conjugate matches.
> --
> http://www.mindspring.com/~w6rca

Yet, we do like to discuss it, don't we.

Steve

3666. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <IGPA5.10078$tl2.717391@bgtnsc07-news.ops.worldnet.att.net>
Source record: 179167

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:39D3BEB1.51DCFA96@mwci.net...
>
> That is exactly what I said also, and have said many times previously.
There is
> not a nickel's difference between your conclusions and mine. My goal was
to use
> very simple examples to illustrate the basic principles of this entire
conjugate
> match problem.
>
> It's interesting how simple concepts can be smothered with rhetoric that
does
> more to confuse than to enlighten.
>
> > > Bill W0IYH
>
>

I was going to post a simple example on the subject, but Bill pretty much
took care of it with his posts.

Thanks,

Steve

3667. Re: 1997 Jeep Cherokee/ATAS 100 - Which Mount???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: M5WJF <mickey@mouse.com>
Message-ID: <39d3c87e@news.server.worldonline.co.uk>
Source record: 179168

I'd also be interested in how you eventually mount this antenna.

I have a Land Rover Discovery with a Watson HB770 on a door edge mounting at the top of the rear door. This is currently connected to an FT-90R.

I've bought an FT-100 and am awaiting delivery of an ATAS-100 to go with it, intending to bring the FT-90R into the shack and putting the Watson in storage.

The current door edge mount provides an excellent mechanical Earth, but it's current location may not be very practical for an ATAS-100, what with needing to drive into these height restricted car parks without having it getting knocked off the back every time.

My initial thoughts are to either move the mount to just above the rear door hinges, so that the ATAS-100 can fit under these height restrictions, but I have considered mounting on the rear bumper at the right-hand side, without obscuring the lights, but will wait until it arrives.

If you can tell me the weight and dimensions of the ATAS-100, and in particular the length of any section that is NOT flexible, along with the type of connection to the coax I'd be most appreciative.

As far as I know a mag-mount installation is not recommended for an ATAS-100 in the documentation I have for the FT-847 and FT-100.

How effective is the antenna on the bands it covers anyway (assuming you've had this antenna on a different vehicle prior to the Jeep)?

de M5WJF

"Jason S. Hulet" <jhulet@aol.com> wrote in message
news:20000928152019.29409.00000027@ng-cq1.aol.com...
> Hello,
>
> Looking to install a ATAS 100 antenna on a 1997 Jeep Cherokee. This
Cherokee
> has a metal hatch. Which mount, besides a mag-mount, to use for the ATAS
100 ?
>
> Thanks for any suggestions...
>
> Jason
> W1WOW

3668. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D2EBB1.2487@wt.net>
Source record: 179182

Peter O. Brackett wrote:
>
> Thread:
>
> Yes, congrats Yuri, and to think that poor Yuri is only just an old TV
> repairman!
>
> Peter [I bought my first ham station with money made from repairing
> TV's] K1PO

I made my first xmtr from the junk you all threw away...:/ MK
--
http://web.wt.net/~nm5k

3669. Re: Query on Rooftop vertical on Apt. building?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Will <gwelfster@earthlink.net>
Message-ID: <39D2EF15.52AE0EC6@earthlink.net>
Source record: 179183

W1RFI wrote:
>
> >From: Will gwelfster@earthlink.net
>
> >Indeed, AEA is out of business, and the Isoloop is no longer available.
> >MFJ does make a similar small transmitting loop, but at nearly $400 for
> >the 40-15 version, it is pricey.
>
> I have seen the MFJ unit close up and I do not believe that it is overpriced.
> The critical part of the loop's performance is the capacitor and their's has
> large plates welded to the loop. They have also made continual improvements to
> the control unit. The Lab kept the Product Review unit, and it has been banging
> around and loaned to different HQ staff without incident for years.
>
> >I have homebrewed two magnetic loops, and while their performance is
> >quite remarkable relative to their size, they present several fairly
> >severe compromises that anyone with adequate space need not accept.
>
> The published efficiency spec for the AEA unit was, if memory serves, 78% on 20
> meters. I ran an EZNEC model and made some assumptions about capacitor Q and
> believe this to be the case. As a small antenna, it lacks the extra dB or so
> of "gain" that one gets with a half-wave dipole, but I am not sure that, if
> properly built for low loss, the compromises are all that severe. The main
> compromise is that it has to be tuned for relatively small frequency
> excursions.

On 20 and above, the small loops acquit themselves well. I still cannot
see the advantage of spending $400 for this antenna, no matter how well
constructed, or how *near* the performance of a dipole it may be, when
for $25 in materials and a little elbow grease one can have an antenna
that requires much less fiddling (especially when browsing a band for
weaker signals), better than 95% efficiency, etc., when the space is
available. Not meaning to dis' MFJ or STAs one bit, it is just a simple
cost/benefit analysis. One thing: given the original poster's intent to
mount an antenna permanently outdoors, in a quite wet (salt air), windy,
and high air-pollution area, where corrosion can decimate an aluminum TV
antenna in 3 or 4 years, how well do you think the loop will hold up?
Not a rhetorical question at all, but I do have my doubts, giving me
another reason to suggest the $25 dipole.

>
> > their efficiency on 40 and 30 is low, on the order of 12-15%,
>
> That sounds lower than I recall for the 30 meter model I ran; I think I was
> seeing about 40% or so. On 40 meters, it will be lower, but the efficiency of

> a loaded 8-foot whip is in the range of 10-15% on 40 meters, too.

I would expect different performance from the 40-15 model and the 30-10
model [better on 30M for the latter of course] ,and the basis of
comparison shouldn't be to a mobile whip--John has 200-300 linear feet
for his antenna, and can get it up about 30' above the roofline, which
is already at 120' above street level. He had intially thought of a
commerical vertical, and I tried to suggest a wire antenna, given the
large amount of space available, and the lower cost, which is important
since high winds have destroyed other verticals at his QTH. Thus,
especially if he wants to work 75 (he does) and 160 (he might), a 90%+
efficient dipole is a more advantageous choice. Walkman stereo's are
great, since you can't walk around city streets with a 200W McIntosh
amp, Thorens turntable, and 10-element Klipsch speakers. But when you
have a big living room (and the budget) which would you choose?
>
> > and you are restricted to an absolute maximum of 150W in transmitting
>
> A real limit, but one that encompasses the vast majority of HF rigs. Those who
> have the limited space requirements are not apt to want to run any more than
> 100 W anyway, for RFI reasons.

I don't know how small loops and restricted space antennas got mixed
into this thread, but this is not an issue for this ham. I know he has
(or did have) an amp (SB-200?) that he wanted to use on 75.

>
> > MFJ does not publish much info on this subject, but I found my clone to clip
> > SSB signals on both TX and RX, as would be expected
>
> I can just barely imagine this to be possible on 40 meters, but even then, I
> have to wonder how the Q could be that high. If the antenna is touted to be
> inefficient, the Q is not high.

My HB loop did this, mea culpa. I really don't know what the effiecy
was, lacking more than a rudimentary FS meter, but the antenna did not
pass an SSB signal without some lopping off of audio highs, it sounded
muffled, and AM SWBC was impossible. Using Reg Edwards' rjeloop1 DOS
program, the prediction, using MFJ's published specs, is close to what I
experienced on mine, in terms of BW and EFF.

>
> >10 KHz, which was essentially a homebrew clone of the MFJ (using a
> >homebrew "trombone-style" variable capacitor with a 40 mil PTFE
> >dielectric, instead of the butterfly air vairable MFJ uses,
>
> I have to ask whether this will have nearly as high a Q as an air-variable with
> plates welded to the radiating loop? On 40 meters, any degradation in the Q of
> the capacitor will make a big difference in the loop performance.

Lacking the equipment to weld, I couldn't tell you.

de Will KD7BFX

3670. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D30307.3DE549DD@mwci.net>
Source record: 179184

atkes@imap1.asu.edu wrote:

> The question is what does your phrase "some technical merit and basis"
> mean. That is, does an incorrect statement have some technical merit?
> If the editor knows that someone is making an incorrect statement does
> it really do the readers of QEX good to publish it?
>
> I hope everyone can see that my complaint is not with the two authors,
> but with what I think is poor editing.

Doug is a very fine Editor. I can say correctly that his policy is to avoid being an Umpire or Referee, but rather to present opposing viewpoints, without bias. I also know that he will respond with his own viewpoints in his own way, when the schedule is appropriate. And I know that he is quite capable of doing that.

Bill W0IYH

3671. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D304F8.1E9E373D@mwci.net>
Source record: 179185

CAM wrote:

> "William E. Sabin" wrote:
> > It is true that the internal resistance is a "dynamic" lossless resistance, and it is
> > true also that actual resistive tank losses modify the "net" value of internal
> > resistance, but to claim that this process *assures* a conjugate match inside the
> > amplifier is a "stretch" to say the least. It just simply cannot be guaranteed
> > according to any kind of analysis that I can think of.
>
> Well, I did say "almost" automatically. :-) Since the load-line is
> dynamic, why is it surprising that it automatically adjusts itself
> to the load? The dissipative source resistance is somewhat out of
> our control but how about the non-dissipative dynamic source
> resistance being effected by the load?

The amplifier is designed to operate into some definite and fixed value of load that does not change with signal amplitude. The one-cycle average value of tube/xistor dynamic output resistance does vary with amplitude. The problem is that there is no guarantee whatsoever that this average value is some magic number that guarantees a conjugate match.

Amplifier design is based on DC supply voltage, plate voltage excursions, plate current excursions, and output signal linearity considerations. Ordinarily, conjugate match is not a consideration at all.

Bill W0IYH

3672. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000928044700.11013.00001149@ng-fz1.aol.com>
Source record: 179186

>From: Dick Carroll dixie@townsqr.com

>I understand that ARRL removed his book "Reflections" from their sales
>inventory because of such protests by one or more of these efficiency
>experts. That is really a shame, indeed a travesty.

Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice against Maxwell or the concepts presented in Reflections. On what basis do you conclude that the League removed the book over "protests" rather than the level of sales?

73,
Ed Hare, W1RFI

3673. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000928050020.18590.00001328@ng-fz1.aol.com>
Source record: 179187

>From: "VE9SRB" srbest@worldnet.att.net

>I would suggest that anyone interested in the topic read Walt's QST work and
>his "Reflections" book.

See:

http://www.arrl.org/tis/info/pdf/Reflect.pdf

73,
Ed Hare, W1RFI

3674. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D30BC7.F45E5A82@mwci.net>
Source record: 179188

Tom W8JI wrote:

> I'd like to know where the idea comes from that Thevenin models can be
> used to calculate efficiency, since the rules of using the model
> prohibit that use.

The output resistance (call it rp) of the tube/xistor varies, sometimes quite a bit, over each cycle of RF. However, these variations are "filtered" by the tuned circuit (there always is a filter of some kind, it may just be a lowpass filter).

This variation of the instantaneous value of rp over a cycle has a harmonic spectrum, just like any other waveform. The filter respond to the fundamental component, and this is the *average* one-cycle rp at the fundamental frequency.

To that extent we can talk about a Norton/Thevenin circuit. The big problem is that as the RF signal amplitude varies with modulation the one-cycle average value of rp varies in unpredictable ways. In a "linear" amplifier the change will not be enormous because this variation is itself *one* source of nonlinearity.

The best signal to use to find rp is a two-tone signal that has the desired quality of intermodulation distortion products. That way we get average rp over a full *modulation* cycle. This is very close to a real-world value with the PA operating as the Lord intended.

Bill W0IYH

3675. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000928051959.17225.00001383@ng-fz1.aol.com>
Source record: 179189

>From: Gary Coffman e4zv@bellsouth.net

>> And, energy in the passband = interference.

>Yeah, but if the spectrum is sufficiently whitened, and sufficiently
>dispersed, it should merge with the noise floor of the analog spectrum
>analyzer, and not produce more than a slight degradation of the
>SNR of conventional narrowband equipment, when operated at any
>reasonable physical separation.

Let's do the math. Let's assume uniform distibution of energy within the spread, a reasonable assumption for a fast hopper or a DS SS transmitter. Let's start with a whopping 10 milliwatt SS transmitter and 8 dBi gain antennas on both ends. Let's put it on 440 MHz, with a 5 MHz spread. Let's locate it on a good hill, 1 kM away from a receiver.

Here are the results:

RESULTS:
Frequency = 440 MHz
Total transmit power = .01 watts
Transmit spread = 5 MHz
Receiver bandwidth = 1000 Hz
Transmit power in 1 Hz = -56.9897 dBm/Hz
Transmit power in 1000 Hz = -26.9897 dBm
Transmit antenna gain = 8 dBi
Receive antenna gain = 8 dBi
Distance to receiver = 1 km
Free-space pathloss = -85.31905 db
System loss (path loss +/- antenna gains) = -69.31905 dB
Total loss (path loss +/- antenna gains - spreading loss) = -106.3088 dB
Specified receive system Noise Figure = 6 dB (includes external noise)
Calculated receive system sensitivity in 1000 Hz bandwidth = -138 dBm
Received noise in receiver bandwidth = -96.30875 dBm
Received noise in receiver bandwidth = S 6
Receive system noise floor increase in dB = 41.69154 dB

> But with a reasonable separation, the energy disappears into the
>noise floor for any receiving system except one using the same
>spreading code.

At 10 kM, (admittedly difficult to obtain perfect line of site), the results are as follows. How far away do you consider "reasonable separation?"

RESULTS: 0 dBm average UWB transmit power, 100 MHz UWB BW
Receive antenna = 20 dBi

Frequency = 440 MHz
Total transmit power = .01 watts
Transmit spread = 5 MHz
Receiver bandwidth = 1000 Hz
Transmit power in 1 Hz = -56.9897 dBm/Hz
Transmit power in 1000 Hz = -26.9897 dBm
Transmit antenna gain = 8 dBi
Receive antenna gain = 8 ; dBi
Distance to receiver = 10 km
Free-space pathloss = -105.3191 db
System loss (path loss +/- antenna gains) = -89.31905 dB
Total loss (path loss +/- antenna gains - spreading loss) = -126.3088 dB
Specified receive system Noise Figure = 6 dB (includes external noise)
Calculated receive system sensitivity in 1000 Hz bandwidth = -138 dBm
Received noise in receiver bandwidth = -116.3088 dBm
Received noise in receiver bandwidth = S 2
Receive system noise floor increase in dB = 21.72057 dB

Don't get me wrong, Gary; I believe firmly that the Amateur Radio Service needs to embrace spectrally efficient techniques and do so quickly. Speeched like the recent one by Dale Hatfield better be our wakeup call. But making inaccurate statements that SS will not interfere with narrowband users is NOT going to accomplish that goal; we need to accurately understand the impact in order to effect an orderly transition from the present inefficient systems to more efficient ones. And, to preseve the diversity of the ARS, we also will need to have some separation of some modes; SS and narrowband are generally not mutually compatible.

73,
Ed Hare, W1RFI

3676. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000928061736.01591.00000003@ng-cd1.aol.com>
Source record: 179190

>RESULTS: 0 dBm average UWB transmit power, 100 MHz UWB BW
>Receive antenna = 20 dBi

Mea culpa; delete this from the second table I posted. This was leftover from some previous calclations I had been doing wrt ultra-wideband emissions.

73,
Ed, W1RFI

3677. Re: variometer for ant. tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <jDFA5.589$Qz1.1060@newsfeed.slurp.net>
Source record: 179191

It's late for this thread, but:

Some antenna tuners have switched inductances. I buggered a Dentron for a bit more flexibility by putting a silvered-copper shorted-ring cut from a pipe inside the inductor near the unswitched end of the coil. The ring was fitted so as to be turnable from the front panel. It took care of most of those 'between-switch-position' settings, where the VSWR was low but not low enough (for me, anyway <g>). When the ring was at 90 deg. from the inductor axis, it had minimal effect.

A stack of proper powdered toroid cores can be used to increase inductance, as well.

73, Dave, K3BHJ

3678. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8qv9ko$l53$1@plutonium.btinternet.com>
Source record: 179192

To simplify it even further -

The design load impedance presented to the amplifying device
is

(Peak Voltage Rating) / (Peak Current Rating) ohms

without any reference to what the internal impedance of the
device might be.

Any amateur who has ever designed his own HF PA knows that.

Reg, G4FGQ

3679. Re: Wanted: Plans to Build Weather Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Dennis <wa8shc@stratos.net>
Message-ID: <970140667.62400@newscache.cleveland.core.com>
Source record: 179193

Check the book section of your favorite Ham dealer (AES/HRO etc). The ARRL puts out a book on Sats that shud have what you want. The simplest system is 137Mhz crossed dipoles(polar orbiters). There is also a 1691Mhz system that requires some rather expensive downconverters (Geo Sats).

--
Dennis wa8shc

Robbin Olson <rolson@mcg.net> wrote in message news:39d2c86d$1@news.mcg.net...
> Could someone please direct me to where I can find plans to build an antenna
> that will receive weather satellite images?
>
> Thank you.
>
> R. Olson
>
>

3680. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <c3GA5.221236$c5.4556363@news2.rdc1.on.home.com>
Source record: 179194

Mike Camp <mikerobin@home.com> wrote in message
news:kzyA5.256709$i5.3513655@news1.frmt1.sfba.home.com...
> Richard,
>
> Set up a PayPal account, and let me have the honor of being the first to
> contribute to your defense fund.
>
> Mike Camp
> KI7FQ
>

I doubt Chirp is going to squat. He is full of hot air. This Newsgroup is the only people that propably saw that "Press Release". If Chirp actually followed through with every one of his threats he would be in court fulltime. We should feel sorry for him and his family.

Barry D.

3681. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D32F5B.A451C3CD@mwci.net>
Source record: 179195

Reg Edwards wrote:

> To simplify it even further -
>
> The design load impedance presented to the amplifying device
> is
>
> (Peak Voltage Rating) / (Peak Current Rating) ohms
>
> without any reference to what the internal impedance of the
> device might be.

As usual Reg, right on the button.

Bill W0IYH

3682. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928080326.10951.00000003@ng-ci1.aol.com>
Source record: 179196

>>From: Dick Carroll dixie@townsqr.com
>
>>I understand that ARRL removed his book "Reflections" from their sales
>>inventory because of such protests by one or more of these efficiency
>>experts. That is really a shame, indeed a travesty.
>
>Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
>against Maxwell or the concepts presented in Reflections. On what basis do
>you
>conclude that the League removed the book over "protests" rather than the
>level
>of sales?
>
>73,
>Ed Hare, W1RFI
>

Dick has a history of making outrageous, incorrect statements meant to tarnish the reputation of others.

Why don't you quote some of your comments about me last year, Dick?

73
Chip n1IR

3683. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928082948.11146.00000002@ng-ci1.aol.com>
Source record: 179197

```
>
>NC means "Not Closed"!
>
>This thread is...
>
> Peter K1PO
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20000924134227.07667.00000587@ng-fc1.aol.com...
>> >
>> >Fractenna <fractenna@aol.com> wrote in message
>> >news:20000923145257.17845.00000559@ng-fm1.aol.com...
>> >> >Anyone with half a brain would realize that it is not, even if only by
>> >the
>> >> >continuous "This thread is closed" messages posted by yourself.
>> >> >
>> >> >Now go home and use the bathroom instead of peeing in the sandbox.
>Leave
>> >the
>> >> >use of the newsgroups to adults.
>> >> >
>> >> >"Fractenna" <fractenna@aol.com> wrote in message
>> >> >> This thread is closed.
>> >> >>
>> >> >> NC
>> >> >
>> >> >
>> >> This thread is closed.
>> >>
>> >> NC
>> >
>> >Just gotta have the last word don't ya.....
>> >
>> >
>> >
>> >
>> >
>> >
>> >
>> >
>>
>> This thread is closed.
>>
>> NC
```

Hi Peter!

I wonder if you could tell us what your job is, and who you represent in that capacity. It would make a most interesting contextual statement.

73
Chip n1IR

3684. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928083055.11146.00000003@ng-ci1.aol.com>
Source record: 179198

>On or about 27 Sep 2000 21:55:57 GMT, fractenna@aol.com (Fractenna),
>using the forum rec.radio.amateur.antenna did say:
>:
>:
>:U R CH1CKN!
>:
>:BAWK!!!
>:
>:73
>:de N1IR
>
>
>Sounds like a CB'er to me.
>
>-SSB

I don't know if Yuri is also a CBer or not.

Are you?

73
Chip n1IR

3685. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000928083237.11146.00000004@ng-ci1.aol.com>
Source record: 179199

>On 26 Sep 2000 02:03:10 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>>
>>>One persistent JERK has caused several people to leave the
>>>group in disgust. This behavior continues and the JERK does
>>>not appear to have a conscience or any self decency. This
>>>really upsets me as I enjoy learning from several of the
>>>experts provided that I can weed through the nonsense.
>>>
>>>Has the group ever considered going to a moderated group with a
>>>reasonable posting policy? I know that many folks don't like
>>>the idea of a moderated group but virtually everyone dislikes
>>>the constant behavior of this one person who can't possibly
>>>have so much free time and a job. This would fix most of the
>>>problems and instantly reduce the number of posts by 1/6th
>>>without loss of any content. Remember that this one bad apple
>>>is responsible for 1/6th of the posts. I don't know who would
>>>want the unenviable job of moderator. Am I way off base here
>>>or do some folks actually enjoy this infantile behavior?
>>>
>>>Larry, W0QE
>>>
>>
>>
>>I think a moderated RRAA is a great idea Larry.
>>
>>If I had the time I would volunteer.
>>
>>73
>>Chip N1IR
>your the moron who he is talking about numb nuts
>sueme

Exactly the kindly of shameless nonsense that justifies said moderation.

73
Chip n1IR

3686. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D346B2.C53F3EF5@hiwaay.net>
Source record: 179200

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. His "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

Fractenna wrote:
>
> >
> >NC means "Not Closed"!
> >
> >This thread is...
> >
> > Peter K1PO
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000924134227.07667.00000587@ng-fc1.aol.com...
> >> >
> >> >Fractenna <fractenna@aol.com> wrote in message
> >> >news:20000923145257.17845.00000559@ng-fm1.aol.com...
> >> >> >Anyone with half a brain would realize that it is not, even if only by
> >> >the
> >> >> >continuous "This thread is closed" messages posted by yourself.
> >> >> >
> >> >> >Now go home and use the bathroom instead of peeing in the sandbox.
> >Leave
> >> >the
> >> >> >use of the newsgroups to adults.
> >> >> >
> >> >> >"Fractenna" <fractenna@aol.com> wrote in message
> >> >> >> This thread is closed.
> >> >> >>
> >> >> >> NC
> >> >> >

> >> >> >
> >> >> This thread is closed.
> >> >>
> >> >> NC
> >> >
> >> >Just gotta have the last word don't ya.....
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >>
> >> This thread is closed.
> >>
> >> NC
>
> Hi Peter!
>
> I wonder if you could tell us what your job is, and who you represent in that
> capacity. It would make a most interesting contextual statement.
>
> 73
> Chip n1IR

3687. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D346DF.8B04C7A2@hiwaay.net>
Source record: 179201

The reader should be aware that the individual responsible for the screen name "Fractenna" is a known troll and has been banned from several mailing lists dedicated to Ham Radio. His "discussions" inevitably lead to strife.

ANY response to him is likely to lead to a disagreeable interaction. If you doubt this, please view the archives for this News Group, with particular attention to the screen name "Fractenna".

He is an ego-driven person who does not react well to ANY disagreement or difference with his position. He has been known to misquote, misinterpret and distort messages from others that put him in a poor light. He has done damage to some people, off line, because he saw them as a danger to his "reputation".

Be warned

Fractenna wrote:
>
> >On 26 Sep 2000 02:03:10 GMT, fractenna@aol.com (Fractenna) wrote:
> >
> >>>
> >>>One persistent JERK has caused several people to leave the
> >>>group in disgust. This behavior continues and the JERK does
> >>>not appear to have a conscience or any self decency. This
> >>>really upsets me as I enjoy learning from several of the
> >>>experts provided that I can weed through the nonsense.
> >>>
> >>>Has the group ever considered going to a moderated group with a
> >>>reasonable posting policy? I know that many folks don't like
> >>>the idea of a moderated group but virtually everyone dislikes
> >>>the constant behavior of this one person who can't possibly
> >>>have so much free time and a job. This would fix most of the
> >>>problems and instantly reduce the number of posts by 1/6th
> >>>without loss of any content. Remember that this one bad apple
> >>>is responsible for 1/6th of the posts. I don't know who would
> >>>want the unenviable job of moderator. Am I way off base here
> >>>or do some folks actually enjoy this infantile behavior?
> >>>
> >>>Larry, W0QE
> >>>
> >>
> >>
> >>I think a moderated RRAA is a great idea Larry.
> >>

> >>If I had the time I would volunteer.
> >>
> >>73
> >>Chip N1IR
> >your the moron who he is talking about numb nuts
> >sueme
>
> Exactly the kindly of shameless nonsense that justifies said moderation.
>
> 73
> Chip n1IR

3688. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d347d6.15609318@news.akorn.net>
Source record: 179202

On Thu, 28 Sep 2000 03:44:40 -0500, "William E. Sabin"
<sabinw@mwci.net> wrote:

>The amplifier is designed to operate into some definite and fixed value of load that does
>not change with signal amplitude. The one-cycle average value of tube/xistor dynamic
>output resistance does vary with amplitude. The problem is that there is no guarantee
>whatsoever that this average value is some magic number that guarantees a conjugate match.

No onbe has ever said a conjugate match exists in the non-linear part
of the system, have they?

If so, that isn't correct.

73 Tom

3689. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39D34940.7CFCDBCC@3n.net>
Source record: 179203

Wayne Jones wrote:
>
> I want to put up a budget 30 foot 20m dipole suspended by 2 masts....
>
> Does anyone know if the conduit is strong enough ...

Like others, I doubt conduit is strong enough. There's a shortage of supply houses here in the sticks so I have used pipe intended to support the upper run of chain link fence with some success. 20 ft lengths are available and it's stronger than the TV mast pipe sold by Radio Shack. Naturally YMMV
73deKA3DWW

3690. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <C9IA5.1208$ai4.241183@news.ntplx.net>
Source record: 179204

Fractenna <fractenna@aol.com> wrote:

> For example: If, two weeks ago, I answer a question which in a very short time
> is again posed, is it, or is it not, inappopriate to have that person go and
> look?

Maybe -- all depends on how much you want the person and others following the thread to know the info. I do not read every post in every thread, and I believe that most people here don't, either.

If I can restate something I said in an earlier post to help an ongoing discussion, I usually don't mind doing so. It is certainly more considerate of the others following the thread than taking several posts to convince people that they should do deja-news searches to find the original post. You are a voluminous poster, Chip, and a deja-news search can involve looking at a lot of posts. Most people will not bother and most will probably assume that if it is not important enough for you to repeat, it is not important enough to look up.

Now, if the real intent is to teach people to do research instead of asking questions, I can understand why you are choosing not to restate the point.

> And if the post is to be repeated, how many times shall it be repeated? Once? twice, infinity?

You seem to have little difficulty hesitation about repeating posts that you want to repeat. :-)

73,
Ed Hare, W1RFI

3691. WTB 70 cm (435 mhz) ANT for AMSAT

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Jaggarao Nattama <jagg@pdq.net>
Message-ID: <75BF3B8045A5800A.920BA9250343308B.0571B16A4E27AE0A@lp.airnews.net>
Source record: 179205

I am looking for an antenna for 435 mHz -circular polarization(for amsat),
preferably a smaller version
in good working condition (all parts) and instruction/assembly manual.
J. Nattama
N2EP

3692. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D34E7F.45F8C698@bigfoot.com>
Source record: 179206

Tom W8JI wrote:
> No one has ever said a conjugate match exists in the non-linear part
> of the system, have they? If so, that isn't correct.

As I understand it, the tank circuit acts like a flywheel to
linearize and filter out the non-linear components, i.e. the
tank circuit becomes the linear source. This is consistent
with considering the coax output connector on a transmitter
as the black box linear source with a corresponding source
impedance that can be (indirectly) measured.
--
http://www.mindspring.com/~w6rca

3693. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: sideband <sideband@cac.net>
Message-ID: <28k6tsgd60sed1jpaat0okgblspto09mnh@4ax.com>
Source record: 179207

On or about 28 Sep 2000 12:30:55 GMT, fractenna@aol.com (Fractenna),
using the forum rec.radio.amateur.antenna did say:
:
:I don't know if Yuri is also a CBer or not.
:
:Are you?
:
:73
:Chip n1IR

I'm a CB operator. I've told you that before. Damn you have a short
memory.

Also, I wasn't talking about Yuri's comments... I was talking about
yours, chip. Is this another example of your selective comprehension?

-SSB

3694. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <atIA5.7159$s76.493248@bgtnsc06-news.ops.worldnet.att.net>
Source record: 179208

Hi Bill:

When I responded to you last night, I was thinking in the context of achieving an impedance match and a conjugate match in the system simultaneously. As I thought a bit more about it, I realized that a more general response should be provided.

"William E. Sabin" <sabinw@mwci.net> wrote in message news:39D27AA5.E4512D1A@mwci.net...
>
>
> The thing that is consistently (conveniently) ignored is that even if the tuner
> is completely lossless, a conjugate match at the output of the tuner cannot be
> achieved *unless* conjugate match at the output of the PA is also achieved.
> In other words (in the above example), unless the output impedance of the PA is 50
> ohms pure resistance. The validity of even a "theoretical" conjugate match in
> the system is based on this crucial premise.
>
> That 50 ohms output resistance is achieved in certain carefully rigged
> experiments, or if the PA is designed specifically to have a 50 ohm output
> resistance, for example by the use of negative feedback. In 95% or more of PA's
> used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there is no
> assurance of this whatsoever in vac tube or xistor PAs.
>
> I suppose there are cases where conjugate match is important. But as a bare
> minimum you had better be damned sure the PA output Z is 50 + j0 ohms. And that
> does not happen by decree or wishful thinking.
>
> I have seen all of the stultifying, mind-numbing rhetoric that tries to convince
> me that the output Z is, in fact, "assured" to be 50 ohms resistive. It is junk
> science.
>
> Bill W0IYH

In any transmission line system, a conjugate match can be established at the output of a tuner regardless of the value of the PA output impedance. In a lossless system, if one establishes a conjugate match at the tuner output, then a conjugate match is simultaneously established at the output of the PA. In a lossy system this will not be the case. For example, a conjugate match can be established at the tuner output but a conjugate match will not be established at the output of the PA. In this case, maximum power is being delivered to the load at the tuner output but maximum power is not being delivered from the PA to the system. Also, in this lossy system, if we establish a conjugate match at the output of the PA, a conjugate match will not be established at the tuner output. In this case, the PA is delivering maximum power to the system but maximum power is not being delivered to the load at the tuner output. When stating that a conjugate match exists in a transmission line system, it is also necessary to define the location at which the conjugate match is said to occur.

Now let's talk about impedance matching. Let's assume that we establish an impedance match at the output of the PA. A conjugate match will only exist at the output of the PA in this case if the output impedance of the PA is also ZO. Stated another way, establishing a conjugate match at the output of the PA will only result in an impedance match if the output impedance of the PA is ZO. This is more in line with my interpretation of your comments last night. In general, the existence of a conjugate match and an impedance match are unrelated.

This is the basis of the conjugate match theorem in transmission line systems. In a transmission line system, more power will be delivered to a load that is conjugately matched than to a load that is impedance matched. The simultaneous existence of an impedance match and a conjugate match at the output of the PA requires the PA output impedance to be ZO.

It is simply incorrect to state that establishing an impedance match at one point in a system simultaneously creates a conjugate match at another point in the system.

73,
Steve, VE9SRB

3695. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <8qvl0h$gm7ml$1@ID-52642.news.cis.dfn.de>
Source record: 179209

Hi Ed et al,

Well, I have the 2.4 gig wireless internet stuff going. I have a couple of observations and an antenna question or two:

The system is an Orinico card with a flat panel kind of antenna which I'll discuss later. The antenna is fed with 50' of LMR 400. This is the PART 15 unlicensed equipment that has been discussed on this NG recently.

With respect to interference:

1. I detect no interference to or from my 2.4 gig video/audio transmitter/rx combo for feeding video and audio from a DBS sat receiver downstairs to the upstairs. The 2.4 gig rx ant is no more than 10' from the wireless inet antenna.

2. I detect no interference from the standard microwave oven to the wireless internet. (This same oven puts video bars and audio hum on the 2.4 gig video/audio tx/rx combo referred to above.)

3. I detect no interference from my 2m/70cm (50w out, 20' antenna separation).

4. I detect no interference from my 100w 30m vertical signal (base of GP is one ft fm wireless internet antenna)

5. I detect no inteference from my other hf ops with a Carolina Windom up 40' that is about 75' from the wireless internet antenna. I have not checked this with my 500 w amp running yet.

I say I get no obvious interference because I can monitor both the base noise level in dBm and signal level in dBm as well as S/N in dBm with the software provided with the card. I can even graph it over a specified time period. I can't induce any kind of fluctuation in the signal level with any of the devices noted above.

Throughput: I am seeing anything from 100 K bps to 400 K bps...the network is not exactly stable at this point. The RF side is stable, but the provider seems to be having "shakedown problems". My last 28 mb dowload averaged 170 Kbps.

Now...on to the antenna questions: (the antenna is a passive device, no preamps or down converters)

1. The existing antenna is a flat panel that is about 5 inches wide, 10 inches tall and 1/2 inch thick. It is mounted Horizontally. That leads me to think it is vertically polarized..maybe an array of dipoles in front of a reflector? Its stated gain is 15 dBi. (By horizontal I mean the 10 inch

length is parallel to the ground), Is it vertically polarized?

2. I have found a replacement antenna designed for exactly the same kind of service that is 39 inches wide...it is a screened reflector dish with stated gain of 24 dBi. It's 3 dB beamwidth is stated at 8 degrees. Is there any reason to assume that simply replacing one antenna with the other will not produce an improved S/N of at least 9 dB? (It might even be better due to the high directivity of the larger antenna)

The antenna can be seen at :
http://www.hyperlink.cc/antenna2400.htm

Model HG2424G

3. What is the attenuation per 100' of LMR 400 coax at 2.4 gig?

My current noise floor is about -95 dBm and my signal level is about -82 dBm.
With the new antenna, I should expect a signal level of -73 dBm...which would be quite an improvement and the noise floor might drop too?

Why am I considering this? Well....the software (as well as the installer) says I have a "marginal" signal level. I have about 13 dB S/N and they would like at least 16 dB and preferably 20 dB. While the systems seems to work well (aside from them not having their internet act together yet), I would like to see the multi-color bar graph S-Meter (and NO IT AIN'T 6 dB per S unit!) go from high yellow to "in the green", especially considering things that might happen to degrade the path. (It's 3.6 miles, but through some trees at various places along the path)

If I have analyzed this correctly, I should get a S/N of 22 dB with the new antenna, which would be exactly what I was looking for. Am I assuming too much or missing something obvious?

I expect to see some 3 to 5 dB improvement in the next month if I do nothing at all, due to the leaves coming off the trees....but that is not something I can rely on.

I would appreciate anyone's observations about the antenna situation and hope that the information regarding my interference to/from Part 15 devices and my ham radio equipment has been useful.

73,

--
hasan schiers, N0AN
schiers@netins.net (normal ISP, have not discontinued yet)
or
schiers@prairieinet.net (wireless ISP)

W1RFI <w1rfi@aol.com> wrote in message
news:20000928061736.01591.00000003@ng-cd1.aol.com...
> >RESULTS: 0 dBm average UWB transmit power, 100 MHz UWB BW
> >Receive antenna = 20 dBi

>
> Mea culpa; delete this from the second table I posted. This was leftover
from
> some previous calclations I had been doing wrt ultra-wideband emissions.
>
> 73,
> Ed, W1RFI
>
>

3696. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8qvlb2$12g$0@208.207.71.173>
Source record: 179210

Fractenna wrote:

> >>From: Dick Carroll dixie@townsqr.com
> >
> >>I understand that ARRL removed his book "Reflections" from their sales
> >>inventory because of such protests by one or more of these efficiency
> >>experts. That is really a shame, indeed a travesty.
> >
> >Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
> >against Maxwell or the concepts presented in Reflections. On what basis do
> >you
> >conclude that the League removed the book over "protests" rather than the
> >level
> >of sales?
> >
> >73,
> >Ed Hare, W1RFI
> >
>
> Dick has a history of making outrageous, incorrect statements meant to tarnish
> the reputation of others.
>
> Why don't you quote some of your comments about me last year, Dick?
>
> 73
> Chip n1IR

You, Sir, are an outrageous statement, and your toy-tennas for which you steadfastedly refuse to provide any cogent explanation, instead petulantly referring anyone who asks to a non-existant website "explanation" to search in vain for something -anything!- that would confirm that they are anything more than some fancifully decorated version of longstanding concepts, are even more outrageous. I concluded long ago that any time spent on you and your "invention" is time wasted. If you believe I tarnished your reputation, you are more than welcome to repost anything I said yourself. I wouldn't waste my time.

3697. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D35A70.87F1FDD8@hiwaay.net>
Source record: 179211

Carefull about that invitation to repost your stuff- He has been known
to make judicious editing changes to posts to mislead later readers.
Selective cutting, pasting, and omissions serve as well as blatant
re-write.

Be warned

Bill- W4BSG

Dick Carroll wrote:

> You, Sir, are an outrageous statement, and your toy-tennas for which you
> steadfastedly refuse to provide any cogent explanation, instead petulantly
> referring anyone who asks to a non-existant website "explanation" to search in
> vain for something -anything!- that would confirm that they are anything more than
> some fancifully decorated version of longstanding concepts, are even more
> outrageous. I concluded long ago that any time spent on you and your "invention"
> is time wasted.
***
If you believe I tarnished your reputation, you are more than
> welcome to repost anything I said yourself. I wouldn't waste my time.
***

3698. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8qvmem$12g$1@208.207.71.173>
Source record: 179212

W1RFI wrote:

> >From: Dick Carroll dixie@townsqr.com
>
> >I understand that ARRL removed his book "Reflections" from their sales
> >inventory because of such protests by one or more of these efficiency
> >experts. That is really a shame, indeed a travesty.
>
> Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
> against Maxwell or the concepts presented in Reflections.

That may be clear to you, Ed but it "clearly" is not clear to many others. The original
complaint resulted in the book being pulled and discontinued, based on sources both here on rraa and other places. The original complainant whose name and callsign I don't recall, wrote criticisms in QST, as I recall. Shortly, Walt and his writings became persona non grata in League publications, according to some of the same sources.
If this is untrue, its past time for the League to end their silence on the matter and explain.This wouldn't be the first time controversies have been merely swept under the rug, rather than beng worked out to a *best result for ham radio* by the League.

> On what basis do you
> conclude that the League removed the book over "protests" rather than the level
> of sales?\

1. I hear many hams are looking for the book but can't find it.2 . I have had a number of them try to purchase my copy which is NOT for sale-
I don't even dare loan it out for fear it won't make it home.
3. Same as in the first paragraph above- the rumor mill which states that it has been pulled from publication due to criticisms by a Collins engineer, and that another magazine is considering resurrecting it under another label. If all this is not factual, I'd very much appreciate a full disclosure by the Leage on exactly what happened and why. If they don't find enough of a market to continue to publish it, they could easily release if for republication by someone who DID see one.

73, Dick W0EX

3699. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: k3ph@dxis.monroe.pa.us
Message-ID: <G1Lr04.LFG@dxis.monroe.pa.us>
Source record: 179213

In article <20000927180345.29694.00000363@ng-mf1.aol.com>,
Fractenna <fractenna@aol.com> wrote:
>>Rick picked up on Yuri making the 3.5 trophy, but--he missed the report
>>back in the back that also shows the BIG TIME, for Yuri.
>>He is listed as the all-time record holder for North America, CW, on
>>Topband,(1.8) which he set in '98.
>>
>>Bill-W4BSG
>>
>>
>
>Unfortunately working DX contests on 80 or 160 does not require the same skill
>set as someone running a 10M contest.
>
>I, personally, don't think Yuri has sufficient skills to beat me.
>
>73
>Chip N1IR

I know I'll be sorry for getting involved in this pissing contest,
but why not just do your best in the 10-meter contest, submit your
score, and let everybody look in QST and see how well you did?
Don't worry about what Yuri does or doesn't do.

73,
Bob

--
+------------------- \-\-\-\ -----------------------------+
| Bob Schreibmaier K3PH | E-mail: k3ph@dxis.monroe.pa.us |
| Kresgeville, PA 18333 | ICBM: 40o55'N 75o30'W |
+---+

3700. Re: no new postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: fjones@ionet.net
Message-ID: <39d36180.2162098@news.ionet.net>
Source record: 179214

Thanks all for your replies. The problem was with Forte Free Agent. Somehow it stopped refreshing postings. I Unsubscribed and then resubscribed to the two newsgroups with the trouble and both started working again. Cyberspace is weird!

73 Frank N5MMB

fjones@ionet.net (frank jones) wrote:

>This is sort of a test. I've received no new material the last couple
>of days. Is anyone else having similar problems.
>
>73 Frank N5MMB

3701. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <26941-39D360E4-25@storefull-111.iap.bryant.webtv.net>
Source record: 179215

Reg Edwards wrote:
"To simplify it even further- The design load impedance presented to the amplifying device is (Peak Voltage Rating) / (Peak Current Rating) ohms, without any reference to what the internal impedance of the device might be."

Exactly.

No power is delivered to a short circuit because there is no voltage drop across the short. No power is delivered to an open circuit because there is no current through an open circuit.

If a tiny resistance loads a generator, a tiny power is delivered to the tiny resistance because there is a tiny voltage developed across the resistance.

If a large resistance loads a generator, a tiny power is delivered to the large resistance because the current through the large rsistance is tiny.

At some value between a short and an open there is a load resistance which permits maximum power to be extracted from the generator (the transmitter) and delivered to that load resistance. This is proven to be a load resistance which is equal to the generator`s internal resistance. If we have an a-c generator (the transmitter), the reactance (if any) in the circuit must be neutralized to get maximum power transfer. Reactance is neutralized by application of an equal amount of the opposite type of reactance (its conjugate). Or we can say we have corrected the power factor. Or we can say we have tuned the circuit to resonance.

In fact, we have reduced the a-c matching problem to the d-c maximum power transfer problem by eliminating the reactance in the circuit.

There should be no dispute that maximum power transfer is only possible when the source and load impedances have the same resistance and the circuit reactance adds to zero.

The long lasting disputes which appeared in this newsgroup in the past became: "Can a radio transmitter match a load?". Some transmitters just generate short pulses for tuned circuits to shape into sine waves, while others are linear by design.

No consensus was reached despite a near record number of postings, and likely can`t be reached as long as there is so much conflicting expert testimony. Amateurs are likely to only agree to some extent when most "experts" have written comments which echo each other on the subject of transmitter load matching.

Best regards, Richard Harrison, KB5WZI

3702. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <39d35ace.5423919@news.mcn.org>
Source record: 179216

On 28 Sep 2000 08:47:00 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: Dick Carroll dixie@townsqr.com
>
>>I understand that ARRL removed his book "Reflections" from their sales
>>inventory because of such protests by one or more of these efficiency
>>experts. That is really a shame, indeed a travesty.
>
>Why do you use the term "travesty" here, Dick? ARRL clearly has no prejudice
>against Maxwell or the concepts presented in Reflections. On what basis do you
>conclude that the League removed the book over "protests" rather than the level
>of sales?
>
>73,
>Ed Hare, W1RFIEd,

Ed,

If I am to assume by your statements that the decision to remove
"Reflections" from publication was due to level of sales then I'll ask
you this question.

Why were Walter's writings, which were many, deleted from the ARRL
Antenna Book and ARRL Handbook at about the same time? It seems to me,
and I think some others on the news group, that such actions certainly
appear to be more political than technical.

Would you care to comment?

Danny, K6MHE

3703. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39ff6728.518125344@news.seanet.com>
Source record: 179217

On Thu, 28 Sep 2000 03:04:48 GMT, "Mike Camp" <mikerobin@home.com>
wrote:

>Richard,
>
>Set up a PayPal account, and let me have the honor of being the first to
>contribute to your defense fund.
>
>Mike Camp
>KI7FQ
>
>Freedom of Expression in the West!
>

Hi Mike,

For your support, you have earned one get out of suit free card and
get to pass go. I am heartened that you decline my invitiation to the
gallows and are freeing up your spot to the truly deserving bleeding
hearts.

73's
Richard Clark, KB7QHC

3704. IsoLoop and IsoTron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:00:00 UTC
From: wa2bfw@my-deja.com
Message-ID: <8qvs5l$9ir$1@nnrp1.deja.com>
Source record: 179218

Since relocating out here to Calif. I'm going to have to go with an attic antenna for the time being. I'm leaning towards an AEA or MFJ IsoLoop for 10-30 and the IsoTron for 40/80. I've got some questions and would like comments on either or both of these unique antenna designs.

First the IsoLoop:
1. Although no longer made by AEA, MFJ has picked up the slack here.. There apparently were 2 versions of the antenna, the first had a metallic band as a loop, the second (newer) model has a tubular loop. There were also variations of the control box, and LCU-1, LCU-2 and IT-1, being the first, second and autotune type. Is my information correct? Can anyone tell me the differences, pros and cons of the different variants of the antenna and the controller? From what I can tell, the key point with these antennas is to have a welded variable hi-voltage capacitor.
2. Whats the latest info on the MFJ version? have they made upgrades/improvements since AEA got out of making these?

Now the IsoTron
1. I've read good reviews about these and they seem a better solution to working 40 and 80 than the IsoLoop antenna. Does anyone have any experience with the 40/80 model that they would care to comment on?

Has anyone tried both of these antennas and been able to make a real-life comparison between the two?

I'd appreciate any comments. I'll be cross posting this ine rec.radio.amateur.antennas.

Thanks, 73
Marv
WA2BFW/6

Sent via Deja.com http://www.deja.com/
Before you buy.

3705. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:02:11 UTC
From: fractenna@aol.com
Message-ID: <20000927200211.08988.00000620@ng-ff1.aol.com>
Source record: 179252

>
>Geez Chip, don't do that while I'm drinking coffee--right up the nose!
>
>Rick K1BQT
>

Don't do what?

Please don't refer to a meat grinder this time.

Thanks!

73
Chip N1IR

3706. Re: HURRAH! ** QEX** TO RUN FRACTAL ANTENNA ARTICLE!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:03:07 UTC
From: k1bqt@aol.com
Message-ID: <20000927200307.19879.00000929@ng-mf1.aol.com>
Source record: 179253

There's a simpler explaination, Chip. No editor has to put up with bullshit from a prospective author if they don't elect to--it's one of the very few perks that go with that position.

Rick K1BQT

3707. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:05:58 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <GXvA5.2257$fx6.131220@bgtnsc05-news.ops.worldnet.att.net>
Source record: 179254

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D26C63.AFC836EE@bigfoot.com...

>
> Flames from your end? Too much Mexican food?
>

No doubt. I do enjoy Mexican food, although it is very hard to get in these parts.

>
> But this may be akin to saying that the yardstick at the NBS is not
exactly
> a yard long. Exactly how far can a real world Conjugate Match deviate
> from an ideal Conjugate Match and still be called a Conjugate Match. Are
> we talking 0.000001% accuracy or 10% accuracy?
> --
> http://www.mindspring.com/~w6rca

I would not argue the point you are trying to make. You are correct that in practice, close enough is more than good enough. If you operate with a good lowloss tuner, achieving a perfect conjugate match would be an unnecessary exercise. We know that it all "works" in the real world.

My interest in this topic lies in the technical discussion, and understanding the theory. The whole topic from everyone's perspective has always been a theoretical discussion. With this in mind, the discussion should be fine. I think that since it is a technical discussion, the correct points should be presented and understood (that said, I accept that we disagree as to what is correct).

73,
Steve, VE9SRB

3708. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:06:28 UTC
From: rwclark@seanet.com
Message-ID: <39fa887a.461119504@news.seanet.com>
Source record: 179255

On Wed, 27 Sep 2000 23:28:32 GMT, n7ws_nospam@arrl.net (Wes Stewart)
wrote:

>On Wed, 27 Sep 2000 23:26:27 GMT, rwclark@seanet.com (Richard Clark) wrote:
>
>[snip]
>
>>
>>The measure of RF Power by amateurs cannot be said to be any more
>>accurate than 20% without a considerable investment in equipment,
>>training, and NIST certification. Basically much the same could be
>>said of amateur editing.
>
>Gasp! Say it isn't so! Why just today I responded to a message on the
>towertalk reflector wherein a gentleman claimed that he measured the line loss
>on a 200+ft run of cable as 0.1 dB, using nothing but his "trusty" MFJ analyzer.
>
>Sheese. Who needs NIST?
>
>73,
>
>Wes N7WS
>
>
>>73's
>>Richard Clark, KB7QHC

Hi Wes,

The measure of RF Power and RF Attenuation are worlds apart in both
accuracy and resolution. A Simpson 260, load and a simple detection
circuit (1N914 and cap) with a step attenuator will resolve very well
and provide good accuracy - but only as good as the step attenuator.
Even here there is no need of NIST, but training yes.

Measure that appeals to ratios is probably the best approach to any
problem that requires accuracy as it is generally easy for even the
amateur to accomplish the calibration. This level of accuracy can
approach 1/100ths of a percent depending upon what is being
calibrated. I have employed these techniques out to 15 places.

Measure of RF Power is extremely difficult - if one desires to be
accurate. In HF, the best bench accuracy at NBS rarely rose above 1%
typical. You could get more if you had deep pockets. This begs the
question, who cares? The FCC measuring your output would use as
crummy a meter as you might find on your own shelf. Their only saving

grace is that they would have a Cal sticker on theirs (because it is required of them by law) telling them that their meter is exactly 20% inaccurate.

73's
Richard Clark, KB7QHC

3709. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:08:00 UTC
From: rwclark@seanet.com
Message-ID: <39fb8bbf.461956167@news.seanet.com>
Source record: 179256

On Wed, 27 Sep 2000 18:29:17 -0500, CAM <cam2338@bigfoot.com> wrote:

>So the argument has nothing to do with reality, huh?

Hi Cecil,

I couldn't have put it better. :-)

73's
Richard Clark, KB7QHC

3710. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:09:42 UTC
From: k1bqt@aol.com
Message-ID: <20000927200942.19879.00000932@ng-mf1.aol.com>
Source record: 179257

>Please don't refer to a meat grinder this time.<

You mean the one I'd rather stick my dick in before I'd subscribe to one of your opaque reflectors??

Rick K1BQT

3711. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:13:25 UTC
From: rwclark@seanet.com
Message-ID: <39fc8bee.462003015@news.seanet.com>
Source record: 179258

On Wed, 27 Sep 2000 18:16:05 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>> The yardstick is in Paris. And it isn't a yard long (unless we're
>> talking about about 10% accuracy).
>
>So you're a yardstick expert - how about conjugate matches? :-)

Hi Cecil,

Yes. Done that, and verified by NBS/NIST. From DC to 12 GHz. It is
the first step of RF power determination from procedures mandated by
that agency.

73's
Richard Clark, KB7QHC

3712. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:28:32 UTC
From: 2w8ji@contesting.com
Message-ID: <39d2ae2b.62119667@news.akorn.net>
Source record: 179267

From Circuits and Networks by Koehler. The section on Network Analysis and Impedance Matching. Section 5-7. Conjugate Impoedance Match.

"For many applications the purpose of inserting a network between a source impedance Zo and a load impedance ZL is to effect a conjugate impedance match."

"The purpose for this is, as given in Chapter 2 section 5, is to deliver the optimum power to ZL."

"The conjugate impedance matched network, in general, is neither an image or an interative impeance match. <snip> For lossless, OR NEAR LOSSLESS, networks the magnitude of current, or of the power, may easily be determined because a conjugate match occurs at both input and output terminals of the network."

"When the generator and load impedances are resistances and the parameters of the network are lossless, the network becomes image impedance matched."

From Network Theorems Chapter 2 :

2-5 Maximum Power Transfer Theorem
"In order to deliver optimum power to a load impedance ZL that is connected to the output terminals of a network of linear and bilaterial impedances driven by an emf Es with an internal Zs, the impedance ZL must be the complex conjugate of the impedance measured across the output terminals when Es is zero and Zs is left in the circuit."

My systems are close enough to being conjugately matched to use the equations and definitions in the above chapters. Your systems may not be, but it works for me. It measures that way, it behaves that way.

It's also easy to find verification of the misuse of Thevenin and Norton's Theorems, where the theorems themselves preclude the use of an actual resistor to represent what the source looks like for anything more than describing the point of maximum power transfer.

We certainly spend a lot of time arguing about a definition that was well accepted until a few years ago in our community, and a definition that is still well accepted outside of our community.

I'd like to know where the idea comes from that Thevenin models can be used to calculate efficiency, since the rules of using the model prohibit that use. Seems like a lot of people argue using theorems they have never bothered to read.

73 Tom

3713. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 00:37:02 UTC
From: 2w8ji@contesting.com
Message-ID: <39d2b5e2.64095502@news.akorn.net>
Source record: 179268

On Wed, 27 Sep 2000 17:57:17 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I've never seen a delta loop with gain of 2-4 dB better than a dipole in
>any modeling I've done, with any program. In fact, most loops I've
>modeled are inferior to a dipole if the tops of the antennas are at the
>same height.

Same here.

I can easily put up loops, but I don't.

They not only don't model to have any real advantage when installed at
the same height as a dipole, they also don't work as well as near as I
can tell from having actually "done that".

What you might do is just use a dipole, and tell people it is a loop.

73 Tom

3714. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 01:03:48 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39D298AB.835F889F@att.net>
Source record: 179259

I do not mean this personally so put the blow torch away! <:}

I am much more inclined to believe the prediction that EZNEC makes than
to accept what your analyzer reads under the experimental conditions you
described. Your results simply do not agree with the theoretical basis
on which that antenna is working. There are just too many things that
can take place in any experiment, no matter how well contrived and
executed, that can produce results that differ from "theory."

In itself, those results do not disprove "theory" rather they raise
doubt as to be validity of the experimental conditions.

I know that you are trying here and doing a yeomanlike job at it, but
don't be too quick to write off decades of work in this area on the
basis of a ten-minute experiment. And, as gently as I can put it, I
would not rely completely on the accuracy of that analyzer.

Please keep us posted on your work - this is interesting stuff!

--
72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

ehsjr@bellatlantic.net wrote:
>
> W1RFI wrote:
>
> > >From: sideband@mindspring.com
> >
> > > I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> > > have the use of a MFJ 259 analyzer. I am only able to put
> > >this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> > >complex and currently have it hidden under the wooden balcony
> > >of the apartment above me. The SWR is currently about 1.8 at 50 MHz.
> >
> > This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above
> > ground. The antenna, when resonant, would have a feed-point impedance of 90
> > ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.
>
> Ed, I've got a real problem with that. By real problem, I mean:
> I went out and threw together a 6 meter dipole out of zip cord,
> hung it at 8' (actually, 102 inches and also re hung at 95 inches)
> and got a flat SWR on the MFJ 259. The analyzer needle barely
> moved. I then remade the dipole - no loops at the end, and wire-tied

> it to a nylon messenger rope. At 92 inches height I got 1.4 to 1. I
> assume the difference is due to the wire ties and the fact that the
> antenna was in contact with the support rope for its full length.With
> no end loops it had minimum swr at about 52.3 mhz. With end loops
> (to tie the support ropes to it) the minimum SWR was at about 56.1
> I would have used egg insulators instead of loops if I had some on
> hand. The feedpoint is an S0-239 with about 20' of RG 58. I added
> a 4' coax extender cable and re-measured each time - no change in
> the swr. The antenna was installed over wet soil, and the nylon rope
> was slightly damp from laying on the grass for about 5 minutes.
>
> Ok, that said, the reason I did this is that I've never built a dipole
> with a 1:8 to 1 SWR after pruning. I find the cited EZNEC figure
> hard to believe - so hard that I had to check it. I still intend to do
> more checking, but bottom line, I find the EZNEC number
> highly suspect. Could you please re-check it? I don't have
> EZNEC so I can't. I would also ask others to spend a few minutes
> building the antenna and posting the SWR minimums they find.
> You only need to split 5 feet of zip cord (or use 10 feet of single
> conductor) and an S0-239 (or just solder the coax to the elements)
> and can slap the thing together real quick. I'm going to re-do
> my experiment, using egg insulators. If there was no "finger check"
> when you ran it and EZNEC gives 1:8 to 1 then real world measurements
> have to come in very close or need an explanation as to why they
> are so far off. According to my analyzer, the antenna was 50 ohms
> at resonance. The analyzer checks out into a dummy load, and
> measurements with my bird and 2 swr meters (Daiwa cross needle
> and Welz) on my antennas have compared the same as with the analyzer
> in the past (I did not check today) so I don't think there is anything wrong
> with it. I really suspect that EZNEC figure.

3715. Re: Purchase Butternut

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 01:08:08 UTC
From: Pete <Pete@xyz.com>
Message-ID: <YRwA5.79575$Qx4.2599915@news1.rdc1.il.home.com>
Source record: 179260

Check out R & L Electronics in Hamilton Ohio. They're about 10 to 12 dollars cheaper than those listed here.

<chem_man@iwon.com> wrote in message news:39d1fd0b.4200193@news.erols.com...
> Denver Amateur Radio in Pennsylvania is hard to beat on overall
> delivered price. www.denverradio.com
>
> wb0egr
>
> On Tue, 26 Sep 2000 20:21:02 -0700, "James Brock" <jbrock@pacinfo.com>
> wrote:
>
> >Does anyone know a good place to purchase
> >a Butternut antenna. Want a good price!
> >
> >James Brock
> >W7DAU
> >
> >Eugene, OR GO DUCKS
> >
> >
>

3716. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 01:13:19 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39D29AE8.95BA7D4@att.net>
Source record: 179261

Drat, Wes, you and your darned facts messing up a good fuss! <:}

Thanks for a good job.

--
72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Wes Stewart wrote:

> I don't claim the intellectual capability to get in the middle of a discussion
> with the likes of Walt, Steve, Kevin, et al.
>
> Lacking such capability, I often rely on "crutches", in this case I will use
> ARRL Radio Designer (ARD). I will assume Ulrich Rohde and his cohorts
> implemented the correct mathematics and will proceed with the following, that I
> offer without comments other than those necesary to explain my method.

3717. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 02:14:58 UTC
From: The User <NoWay@Hoser.net>
Message-ID: <sba5tsg602tqa3bpt13rdi8cisofcuu3cv@4ax.com>
Source record: 179262

On 26 Sep 2000 02:03:10 GMT, fractenna@aol.com (Fractenna) wrote:

>>
>>One persistent JERK has caused several people to leave the
>>group in disgust. This behavior continues and the JERK does
>>not appear to have a conscience or any self decency. This
>>really upsets me as I enjoy learning from several of the
>>experts provided that I can weed through the nonsense.
>>
>>Has the group ever considered going to a moderated group with a
>>reasonable posting policy? I know that many folks don't like
>>the idea of a moderated group but virtually everyone dislikes
>>the constant behavior of this one person who can't possibly
>>have so much free time and a job. This would fix most of the
>>problems and instantly reduce the number of posts by 1/6th
>>without loss of any content. Remember that this one bad apple
>>is responsible for 1/6th of the posts. I don't know who would
>>want the unenviable job of moderator. Am I way off base here
>>or do some folks actually enjoy this infantile behavior?
>>
>>Larry, W0QE
>>
>
>
>I think a moderated RRAA is a great idea Larry.
>
>If I had the time I would volunteer.
>
>73
>Chip N1IR
your the moron who he is talking about numb nuts
sueme

3718. conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 02:28:48 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <A1yA5.92270$i5.3326085@news1.rdc2.on.home.com>
Source record: 179263

I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will be against my house and the other will be close to and guyed from the corner of my back fence.
I am planning on using 3 10foot sections of electrical conduit, each section smaller than the next so the sections will telescope and can be clamped with about a foot of overlap. I think the sizes I saw at Home Depot were 1 1/4, 1, and 3/4 inches diam

Does anyone know if the conduit is strong enough and how much guying is needed for a 30 foot mast?
Also how would I secure the base of the mast taking into consideration that there will be frost down to 4 feet below ground in winter.

I also saw post where someone suggested stripping electrical house wire to use for the antenna wire. I assume he meant stripping the outer casing containing the coated wires and not the insulation on the individual wires. Do you think this wire is strong enough to hang 30ft without stretching or breaking? Does anyone have any info or opinions on this?

tnx
Wayne Jones
ve3gqx

3719. Re: FS: 2 element 5 band quad antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 02:30:47 UTC
From: Bob Williams <n7int@worldnet.att.net>
Message-ID: <39D2ADD7.5540BDE3@worldnet.att.net>
Source record: 179264
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace

Yeah, I guess I forgot that...If you live near Portland, OR, (actually, Cornelius) and pick it up, it just costs you $250, no shipping.

Bob

klopie wrote:
>
> What city are you in Bob?
>
> Bob Williams wrote:
>
> > FOR SALE: Lightning Bolt 2-element, 5 band (10-20m)quad antenna. As new,
> > still in original boxes, never installed. No room for it at my present
> > QTH now or for the next couple of years. $250 and you pay shipping from
> > 97113..73, Bob

3720. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 02:58:37 UTC
From: k3bu@aol.com
Message-ID: <20000927225837.17630.00000874@ng-fe1.aol.com>
Source record: 179265

>
>If anything confounds me, it is the discussion of what amounts to an
>isolation pad to impedance match a transmitter to its antenna. If
>matching circuits are low loss, maximum power transfer makes sense.
>Broadcasters measure antenna impedance and install the conjugate
>matching network required to seamlessly connect the antenna with the
>feedline so that no power is reflected at the junction. The broadcaster
>can`t afford to waste any power.
>
>Best regards, Richard Harrison, KB5WZI
>
>

So do I :-)
I always try to match the antenna to the feedline's impedance, and if I can,
design the antenna so it has feedline (50 ohms) impedance, so I don't have to
use no stinkin' lossy matches of any kind. One in the PA is enough.
Managed to do that with Razors, 50 ohms, flat SWR and they gave me edge.
Why make RF wander back and forth in the feedline, when it should be going out?
:-) I don't mind filters and gadgets between the exciter and PA, but after the
PA and output tank, its low loss feedline all the way to antennas.

Yuri, K3BU

3721. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 03:04:48 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <kzyA5.256709$i5.3513655@news1.frmt1.sfba.home.com>
Source record: 179266
Body handling: HTML body converted to readable text

Richard,

Set up a PayPal account, and let me have the honor of being the first to
contribute to your defense fund.

Mike Camp
KI7FQ

Freedom of Expression in the West!

"Richard Clark" wrote in message
news:39f1701e.454883047@news.seanet.com...
> On 27 Sep 2000 22:30:45 +0200, refertofriend@reply.yahoo.com (Yahoo!
> Finance) wrote:
>
> >Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright
Violation to Radio Ham
> >
BOSTON--(BUSINESS WIRE)--Aug. 14, 2000--Fractal Antenna Systems,
> >Inc., has sent notification to a radio amateur to cease and desist in
> >the public dissemination of a fractal antenna web page which falsely
> >mirrors it's recently posted addition.
> >
The company holds a proprietary IP position, including several
> >pending patents, on fractal-element antenna (FEA) and related
> >technology. FEA have been shown to have distinct advantages in
> >virtually all areas of antenna applications, especially in the
> >wireless, broadband, and telecommunications arenas.
> >
Nathan Cohen, Ph.D., CTO and Chair of the company explained the
> >concern over the violation: ``Recently, Fractal Antenna Systems, Inc.
> >graciously added a new addition to its web site, so that radio
> >amateurs can benefit and learn from the `disruptive' antenna
> >technology afforded from fractals. Unfortunately, a radio amateur in
> >Washington State decided to extract the copyright material and
> >produced his own direct and derivative version, without authorization.
> >No permission request was made, and the material posts inaccurate
> >statements which make the technology appear to do exactly the opposite
> >of what it accomplishes. Further, he publicly and globally announced
> >his unauthorized site over USENET, with deleterious effect to the
> >original site, and wide spread distribution.''
> >
Cohen added: ``We have grave concerns that such a malicious effort

> >undermines the good rapport that the company has with the global radio
> >amateur community, many millions strong, and also with its customer
> >base. Such a malicious effort is further being made at a time when the
> >company's first patent has received a notice of allowance, and thus
> >imminent issuance. The bogus site makes no mention of the nature of
> >this and other pending patents with respect to the antenna, thus
> >misleading the reader to consider that the technology is within the
> >public domain, which it is not.''
> >
Cohen notes that the company has allowed radio amateurs permission
> >to build and experiment with the posted antenna design. The radio
> >amateur in violation has neither built nor tested the design, but made
> >inaccurate and misleading statements which do not support the measured
> >or modeled results.
> >
``We strongly support the excitement and learning which our new
> >technology engenders--with hams, students, hobbyists, and others.
> >However, malicious and illegal efforts to present and misrepresent
> >such will lead to legal proceedings as necessary. We continue to
> >invite radio amateurs and others to view and experiment with fractal
> >antennas for private, non-commercial use without sale, and will
> >continue to post new material of interest in non-commercial contexts.
> >However, unauthorized use of copyright material; failure to attribute
> >IP, and so on, are deleterious to the efforts of the firm and cannot
> >be allowed'', stated Cohen.
> >
Cohen finally added that additional web site holders will be
> >informed of any copyright violations and failure to attribute the
> >technology and its pending patent status.
> >
Fractal Antenna Systems, Inc. is a privately held Florida
> >corporation, with its principle base at Telecom City in Massachusetts.
>
> Hi All,
>
> Wow!
>
> Looks like I'm going to Disneyland!
>
> I would consult an attorney in regards to this slander and defamation,
> but then I would miss the joke. To paraphrase Andy Warhol: "everyone
> will be infamous on the internet for 15 microseconds."
>
> Instead I will bide a while until such time as Fragile Antenna's
> assets are well established and can afford me a comfortable, early
> retirement - but that's the Joke! Assets? This is dreaming in
> technicolor and surround sound.
>
> This announcement at Yahoo alone is enough to plunge the stock of any
> company down the toilet. Gad, it sounds so desperate and pleading.

> But this approach is very nearly the same as I've pointed out
> elsewhere, it seems the best line of defense is to damn your own
> design (company) to put a pox on the replica (reviewer).
>
> For those who are curious about the genesis of this, they may visit my
> page at:
> http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
> or perform a search of DejaNews with the term "k2" or "Flying H."
>
> Here you can observe how these designs pour power into the ground to
> optimize a successful launch angle at 10 degrees with -4.7dBi (+/- 3
> dB). And the good news is that this is the best gain you will obtain!
> The price is a little stiff though - variations of several inches in
> elevation can drive the SWR through the roof. Want to experience the
> thrill of these without building them? A handful of mud in each ear
> would come to a close approximation at those other angles (it also
> helps with F/B so that those annoying back seat drivers or noisy
> patrons at the movies don't upset you).
>
> So now, where's all the bleeding heart types who offer that redemption
> of the savage is a noble prospect? I won't count on you fellows for
> my defense fund, but I will save a spot at the gallows for you (bring
> your dancing shoes). ;->
>
> 73's
> Richard Clark, KB7QHC the worlds' most bestest fractal designer of
> all time, & reviewer to the stars of mythically superb radiators
>
> p.s.
> a tip of the hat to the anonymous poster for this superb piece of
> comedy.
> rwc

3722. Try this out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 03:35:05 UTC
From: kaltate@kcinter.NET
Message-ID: <003e01c028fc$306a0ce0$adf6bad1@yellowcorp.com>
Source record: 179169
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_003B_01C028D2.46EC2C20

charset="iso-8859-1"

Thought some of you may want to try this too. Easy money maker with =
results that will keep you from spending 10-20 dollars a week on the =
lottery to return a meager 5 dollars. You're still behind no matter how =
you want to look at it!!!!

Read all of this - better chances of better returns than the lottery!!!

GET $40,000 WITH ONLY 6 BUCKS!!! THIS IS NOT A SCAM!!!

A while back, I was browsing these newsgroups, just like you are now, =
and came across an article similar to this that said you could make =
thousands of=20

CASH within weeks with only an initial investment of $6.00 plus stamps! =
So I thought, "Yeah, right, this must be a scam!" But like most of us I =
was curious and kept reading. It said that if you send $1.00 to each of =
the 6 names and addresses listed in the article, you could make =
thousands in a very short period of time. You then place your own name =
and address at the bottom of the list at #6, and post the article to at =
least 300 newsgroups. (There are about 32,000 of them out there and =
that's quite a large market pool). I invested EXACTLY $7.98 six stamps =
at 33 cents and six $1.00 bills. and boy am I glad I did!!! Within 7 =
days, I started getting CASH in the mail! I figured it would end soon =
and didn't give it another thought. But the CASH continued coming in. In =
my 1st week I made $20. By the end of the 2nd week I had a made a total =
of $1,000. In the 3rd week I had over $10,000 and it was still growing. =
This is now my 4th week and I have made a total of just over $42,000 and =
it's still coming in . Also, make sure you print a copy of this article =
NOW, so you can get the information off of it as you need it. I promise =
you that if you follow the directions exactly, that you will start =
making more CASH than you thought possible by doing something so easy! =
Suggestion: Read this entire message carefully! (print it out or =
download it.) Follow the simple directions and watch the CASH come in! =
IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal; =
and it is virtually no risk - it really works!!!! If all of the =
following instructions are adhered to, you will receive extraordinary =
dividends. This program remains successful because of the honesty and =
integrity of the participants. Please continue its success by carefully =
adhering to the instructions. Here's the 4 easy steps to success: STEP =
```

1: Get 6 separate pieces of paper and write the following on each piece =
of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills =
and place ONE inside EACH of the 6 pieces of paper so the bill will not =
be seen through the envelope (to prevent thievery). Place one paper in =
each of the 6 envelopes and seal them. You should now have 6 sealed =
envelopes, each with a piece of paper stating the above phrase, your =
name and address, and a $1.00 bill. What you are doing is creating a =
service. Like most people I was a little skeptical but it truly works.=20

Mail the 6 envelopes to the following addresses:

#1) WW2

9008 Mill Valley Cir.#429

Ft.Worth, TX 76120

#2) A.Koopman

2815 Rampart Circle

Clearwater, FL 33761

#3) NAR

2435 Remington Road

Green Bay, WI 54302

#4)LP

P.O Box 1641

Metairie, La 70004

#5) TMB

3354 Christie Blvd

Toledo, OH 43606

#6) K Tate

621 Smiley Road

Tonganoxie, KS 66086

STEP 2: Now take the #1 name off the list that you see above, move the =
other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as =
number 6 on

the list.STEP 3: Change anything you need to, but try to keep this =
article as close to original as possible. Now, post your amended article =
to at least 300=20

newsgroups. (I think there are close to 32,000 groups) All you need is =
300, but remember, the more you post, the more CASH you make! Keep a =

copy of these steps for yourself and, whenever you need CASH, you can =
use it again, and again.

PLEASE REMEMBER that this program remains successful because of the =
honesty and integrity of the participants and by their carefully =
adhering to the directions.

Look at it this way. If you are a person of integrity, the program will =
continue and the CASH that so many others have received will come your=20

way. NOTE: You may want to retain every name and address sent to you, =
either on a computer or hard copy and keep the notes people send you. =
Also, it might be a good idea to wrap the $1 bill in dark paper to =
reduce the risk of mail theft.) So, as each post is downloaded and the =
directions carefully followed, six members will be reimbursed for their =
participation as a List Developer with one dollar each. Your name will =
move up the list geometrically so

that when your name reaches the #1 position you will be receiving =
thousands of CASH! What an opportunity for only $6.00 ($1.00 for each of =
the first six

people listed above) Send it now, add your own name to the list and =
you're in business! ---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS =
Step 1) You

do not need to re-type this entire letter to do your own posting. Simply =
put your cursor at the beginning of this letter and drag your cursor to =
the=20

bottom of this letter,and select 'copy' from the edit menu. This will =
copy the entire letter into the computer's memory. Step 2) Open a blank =
'notepad' file and place your cursor at the top of the blank page. From =
the 'edit' menu select 'paste'. This will paste a copy of the letter =
into notepad so that you can add your name to the list. Step 3) Save =
your new notepad file as a .txt file. If you want to do your postings in =
different settings, you'll always have this file to go back to.Step 4) =
Use Netscape or Internet explorer and try searching for various =
newsgroups (on-line forums, message boards, chat sites, discussions.)

Step 5) Visit these message boards and post this article as a new =
message by highlighting the text of this letter and selecting paste from =
the edit=20

menu. Fill in the Subject, this will be the header that everyone sees as =
they scroll through the list of postings in a particular group, click =
the post message button. You're done with your first one! =
Congratulations...THAT'S IT! All you have to do is jump to different =
newsgroups and post away, after you get the hang of it, it will take =
about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS YOU =
POST IN, THE MORE CASH YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF =
300** You will begin receiving CASH from around the world within days! =
If you wish to stay anonymous, you can invent a name to use, as long as =

the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE =
CORRECT.**=20

Now the WHY part: Out of 300 postings, say I receive only 7 replies (a =
very low example). So then I made $7.00 with my name at #6 on the =
letter. Now, each of the 7 persons who just sent me $1.00 make the =
MINIMUM 300 postings, each with my name at #5 and only 7 persons respond =
to each of the 7 original 7, that is another $49.00 for me, now those 49 =
each make 300 MINIMUM posts with my name at #4 and only 7 replies each, =
I will bring in an additional $343.00! Now, those 343 persons turn =
around and post the MINIMUM 300 with my name at #3 and only receive 7 =
replies each, I will make an additional $2401.00! OK, now here is the =
fun part, each of those 2401 persons post a MINIMUM 300 letters with my =
name at #2 and they each only receive 7 replies, that just made me =
$16,807.00!!! Those 16807 persons will all deliver this message to 300 =
newsgroups with my name at #1 and if still 7 persons per 300 Newsgroups =
react I will receive $117,649.00! With an original investment of only =
$6.00! And some stamps. AMAZING! When your name is no longer on the =
list, you just take the latest posting in the newsgroups, and send out =
another $6.00 to names on the list, putting your name at number 6 again. =
And start posting again. So can you afford $6.00 and see if it really =
works?? People have said, "what if the plan is played out and no one =
sends you the CASH? So what! What are the chances of that happening when =
there are tons of new honest users and new honest people who are joining =
the internet and newsgroups everyday and are willing to give it a try? . =
Remember, play FAIRLY and HONESTLY and this will really work. ** By the =
way, if you try to deceive people by posting the messages with your name =
in the list and not sending the CASH to the rest of the people already =
on the list, you will NOT get as much. Someone I talked to knew someone =
who did that and he only made about $150.00, and that's after seven or =
eight weeks! Then he sent the 6 $1.00 bills, people added him to their =
lists, and in 4-5 weeks he had over $10k. This is the fairest and most =
honest way I have ever seen to share the wealth of the world without =
costing anything but our time!!! You also may want to buy mailing and =
e-mail lists for future CASH. Make sure you print this article out RIGHT =
NOW! Also, try to keep a list of everyone that sends you CASH and always =
keep an eye on the newsgroups to make sure everyone is playing =
fairly.Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the =
basic idea to make the CASH!! That's up to you." Better chance at this =
than the lottery!

------=_NextPart_000_003B_01C028D2.46EC2C20

charset="iso-8859-1"

Thought some of you may want =
to try this=20
too. Easy money maker with results that will keep you from spending =
10-20=20
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sure you=20
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adhered to,=20
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Also, try=20
to keep a list of everyone that sends you CASH and always keep an eye on =
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newsgroups to make sure everyone is playing fairly.Remember, HONESTY IS =
THE BEST=20
POLICY. You don't need to cheat the basic idea to make the CASH!! That's =
up to=20
you." Better chance at this than the=20
lottery!

------=_NextPart_000_003B_01C028D2.46EC2C20--

3723. Force 12 Experiences

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 03:44:54 UTC
From: bobs@isquare.com
Message-ID: <39d2be25.952169827@news.pressroom.com>
Source record: 179170

Does anyone have any comments - good or bad on the Force 12 C36-XR and
WARC-7?

73, Bob
W0YVA

3724. Wanted: Plans to Build Weather Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 04:24:42 UTC
From: Robbin Olson <rolson@mcg.net>
Message-ID: <39d2c86d$1@news.mcg.net>
Source record: 179171

Could someone please direct me to where I can find plans to build an antenna
that will receive weather satellite images?

Thank you.

R. Olson

3725. Re: Wanted: Plans to Build Weather Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 04:32:51 UTC
From: k3bu@aol.com
Message-ID: <20000928003251.17705.00000885@ng-fe1.aol.com>
Source record: 179172

>
>Could someone please direct me to where I can find plans to build an antenna
>that will receive weather satellite images?
>
>Thank you.
>
>R. Olson
>
>

You want to get satellite reception or maps? Maps are available on internet at:
http://www.weatherimages.org/index.html#top

Yuri

3726. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 04:39:44 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8qui2g$d87$0@208.207.71.176>
Source record: 179173

Richard Harrison wrote:

> If anything confounds me, it is the discussion of what amounts to an
> isolation pad to impedance match a transmitter to its antenna. If
> matching circuits are low loss, maximum power transfer makes sense.
>

Evidently this teapot tempest is all over Walt Maxwell's use of the Conjugate Matching Theorem to explain to amateur radio operators how an antenna tuner matches the transmitter to the antenna system. From my perspective, it has been a valuable description, even if not 100% totally accurate from an engineereing standpoint. Many hams have a much better understanding of their antenna systems because of Walt's writings on the subject.And it is close enough to accurate to be very much applicable.

Anyone who has tuned a PI network knows that it is a repetitive juggling act between "tune" and "load" that eventually culminates in a "tuned system" that transfers maximun power from his last RF amplifier stage to his antenna system. Change either "tune" or "load" and you alter conditions in the other, requiring that it be readjusted, repeatedly. Most realize that when "tuned up", the final adjustment is not the last word in -accurate- adjustment, it is merely the closest that his metering can show. If one utilized metering that was an order of magnitude more accurate, he could adjust for a slightly better match -but not by very much. And he STILL wouldn't be exactly matched, only an order of magnitude closer to perfect. It's like walking toward the wall, taking half the distance with each step. You never get to the wall but you soon get so close that for all practical purposes you're there. And he would have wasted considerable assets on the effort while realizing only a miniscule improvement - the law of diminishing returns in action. Evidently this PI network interaction demonstrates a part of the conjugate matching "problem" so high on the perfectionist's list of Things To Be Corrected.

What I see in this discussion is that while Walt has concentrated on teaching ham radio operators how the functional world of ham radio tuners and antennas operates by using the Conjugate Matching model, some of those persons whose function in life is to thoroughly understand and optimize all electronics to the maximum degree possible protest his use of this very effective learning tool on purely theoretical grounds.

I understand that ARRL removed his book "Reflections" from their sales inventory because of such protests by one or more of these efficiency experts. That is really a shame, indeed a travesty. "Reflections" is the one antenna book I'd keep if I could keep only one. Politics, indeed. It's past time for the efficiency mavens to realize that their argument confuses far more than it illuminates at the Amateur Radio level. As an excercise

in engineering theory it is perhaps another matter entirely, although as you well know, practical application of this concept has long been in widespread throughout the radio broadcasting industry. Maybe it's not referred to as "conjugate matching" (which seems to mean slightly different things to different people) but the concept remains.

73, Dick W0EX

3727. Re: Dish antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 04:59:12 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <AeAA5.1479$np1.212668@newshog.newsread.com>
Source record: 179174

I, or a friend would love to have it,

The shipping would be a bear, but drop me an e-mail.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dale Parfitt" <GTE/parinc@GTE.net> wrote in message
news:39D1D17B.4999166C@GTE.net...
>
>
> rcote wrote:
>
> > This is probably not the correct NG to submit this, but is anyone
> > interested in a large dish antenna? It needs to be dismantled and
> > shipped at the purchaser's expense. IT is however 10 meters in
> > diameter. That is about 33 feet, meshed and rotatable.
> > If this is not the best group for this where can I list it?
> >
> > Ray in Hawaii
>
> Hi Ray,
>
> I will forward your mail to the moon-net reflector this morning. This is
> the reflector for amateure using moonbounce. At 1296 MHz and up, large
> dishes are the norm.
>
> Dale W4OP
>

3728. Re: Dish antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:01:18 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ygAA5.1480$np1.212143@newshog.newsread.com>
Source record: 179175

Oops, replied to the wrong post.

I, or a friend would love to have it, if we can afford the shipping<:-))

Drop me an email

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"rcote" <rcote@mano.soest.hawaii.edu> wrote in message
news:39D15629.1A91FB49@mano.soest.hawaii.edu...
> This is probably not the correct NG to submit this, but is anyone
> interested in a large dish antenna? It needs to be dismantled and
> shipped at the purchaser's expense. IT is however 10 meters in
> diameter. That is about 33 feet, meshed and rotatable.
> If this is not the best group for this where can I list it?
>
> Ray in Hawaii
>

3729. Re: Dish antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:01:39 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <TgAA5.1481$np1.212755@newshog.newsread.com>
Source record: 179176

Sorry, replied to the wrong post.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dale Parfitt" <GTE/parinc@GTE.net> wrote in message
news:39D1D17B.4999166C@GTE.net...
>
>
> rcote wrote:
>
> > This is probably not the correct NG to submit this, but is anyone
> > interested in a large dish antenna? It needs to be dismantled and
> > shipped at the purchaser's expense. IT is however 10 meters in
> > diameter. That is about 33 feet, meshed and rotatable.
> > If this is not the best group for this where can I list it?
> >
> > Ray in Hawaii
>
> Hi Ray,
>
> I will forward your mail to the moon-net reflector this morning. This is
> the reflector for amateure using moonbounce. At 1296 MHz and up, large
> dishes are the norm.
>
> Dale W4OP
>

3730. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:03:35 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D2D127.20FE3046@oio.net>
Source record: 179178

Fractenna wrote:
---clipped---
>
> Please don't refer to a meat grinder this time.
>
> Thanks!
>
> 73
> Chip N1IR

Gee Chip, I'll bet that hurt, didn't it?
'Doc

3731. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:03:57 UTC
From: atkes@imap1.asu.edu
Message-ID: <8qujftemr1@news.asu.edu>
Source record: 179177

W1RFI (w1rfi@aol.com) wrote:

snip

: QEX is for the exchange of technical ideas and viewpoints. It is inevitable
: that there be some disagreement in technical areas and I believe that QEX
: readers learn from reading the discussions. As long as those discussions are
: about the topic, have some technical merit and basis and are not character
: assinations, they belong in QEX as technical correspondence, IMHO.

: 73,
: Ed Hare, W1RFI

Ed,

If the argument is whether triodes or tetrodes make a better amplifier,
I can see good reason to hear both viewpoints since it is likely that
both people have technical merit and basis for their arguments.

My understanding is that this argument is like one person taking a 12 volt
battery and a 1000 ohm resistor and claiming the current from Ohm's law
is X. The other person says no it is Y. At that point, I expect more from
the editor than publishing both answers. Maybe that is too much to expect.

The question is what does your phrase "some technical merit and basis"
mean. That is, does an incorrect statement have some technical merit?
If the editor knows that someone is making an incorrect statement does
it really do the readers of QEX good to publish it?

I hope everyone can see that my complaint is not with the two authors,
but with what I think is poor editing.

73 Kevin w9cf@ptolemy.la.asu.edu

3732. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:07:41 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D2D21D.F68097EA@oio.net>
Source record: 179179

Fractenna wrote:
> ---clipped---
> Watza troll?
>
> Is this some on the air contest?
>
> Does it use small dolls with wide eyes and frizzy hair:-)?
>
> Or are you saying Yuri is some kind of under-the bridge nuisance?
>
> 73
> Chip N1IR

Chip, it's too late. 'We' know how you are. As a matter
of fact, after 'your' news release, half the world knows
how you are, and what you are. Go ahead and put as good a
'face' on it as you can though. 'We' understand how it is...
'Doc

3733. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 05:37:07 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <39D2D9A3.5A1EAA5B@earthlink.net>
Source record: 179180

Wayne Jones wrote:

> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. ....
> I am planning on using 3 10foot sections of electrical conduit,...

Wayne, forget the conduit, it's not gonna hold itself, let alone the antenna. Go to the nearest scrap metal yard and you'll find plenty of 2" galvanized steel pipes for a couple of bucks. That should do the job.

Zoran WA7AA ex VA3GW

--
Support freedom of speech, or I'll kill you!

3734. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 06:38:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <39D2E773.7B71@wt.net>
Source record: 179181

Wayne Jones wrote:
>
> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
> be against my house and the other will be close to and guyed from the corner
> of my back fence.
> I am planning on using 3 10foot sections of electrical conduit, each section
> smaller than the next so the sections will telescope and can be clamped with
> about a foot of overlap. I think the sizes I saw at Home Depot were 1 1/4,
> 1, and 3/4 inches diam
>
> Does anyone know if the conduit is strong enough and how much guying is
> needed for a 30 foot mast?
> Also how would I secure the base of the mast taking into consideration that
> there will be frost down to 4 feet below ground in winter.
>
> I also saw post where someone suggested stripping electrical house wire to
> use for the antenna wire. I assume he meant stripping the outer casing
> containing the coated wires and not the insulation on the individual wires.
> Do you think this wire is strong enough to hang 30ft without stretching or
> breaking? Does anyone have any info or opinions on this?
>
> tnx
> Wayne Jones
> ve3gqx

Conduit is pretty flimsy. I'd rather use the fence top rail sections
they sell for chain link fences. The only problem is you can telescope.
But they are swaged at the end to be able to hook together. I have 20 ft
worth supporting a 10m vertical right now. 20 ft is real easy to put up,
but 30 ft is hard for one person. You would need a helper to help pull
it up with a guy wire, while one holds the end. But I think could be
done. Myself, if I had one 30 ft support for a 20 dipole, I wouldn't
even bother with the 2nd mast. I'd just tie the leg off to the fence
with a leader. But you'd have to go inverted v . Would work fine. If you
had 30 ft worth, and had the bottom 10 ft section clamped to the house,
I think you could get by with only one set of guys about 10 ft below the
feedpoint. The dipole would act as a bit of top guying. But actually, I
prefer push up masts. But they cost a bit more than fence rails. But
much easier to work with. Radio shack sells them as well as many TV
places. electrotex, etc. As far as the wire, I wouldn't go to the
trouble of stripping romex unless you had a load free. Lotta work. But
then again you only need 32 ft worth. I buy regular house wire at home
depot in 500 ft spools. The insulation is on the wire, which I prefer in
general. Keeps it from corroding. I use #12 or #14 gauge. #14 is plenty

strong for what you want to do. I have #12 gauge on my set of dipoles. It's so strong it will pull the mast over before the wire broke. It did that once when a teee limb fell on a ant leg. I'd use #14 gauge for yours to keep the weight down. MK
--
http://web.wt.net/~nm5k

3735. Re: Radio Works super loop 80 question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-28 23:54:53 UTC
From: william ewald <wgewald@att.net>
Message-ID: <4fm7ts4dt9m9t61va99ghnmih810n5dfgo@4ax.com>
Source record: 179103

On Wed, 27 Sep 2000 17:19:38 -0700, Phillip Sikes <psikes@whidbey.net>
wrote:

>On Wed, 27 Sep 2000 17:38:51 -0500, CAM <cam2338@bigfoot.com> wrote:
>
>> Most of the single vertical loops
>>that I have modeled showed slightly less gain and slightly wider
>>beamwidths than dipoles for the same maximum height.
>
>I must be missing something here. I am not an antenna guru by any
>means but I have modeled a 40M Delta and a 40M dipole and the Delta
>came out better by 1.8dB over the dipole. I was using Nec4Win to do
>the modeling, is there a problem with this software?

I have a question about all these models. How are they verified
as to their results?

3736. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D53853.925C4F62@eznec.com>
Source record: 178919

Just what is the "effective depth", and how is it used?

The depth which half the current is above and half below is 0.69 times
the skin depth. Where does the 1/2 come from?

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> The effective depth of the ground can be taken as half the
> skin depth of the soil under the antenna. It depends on soil
> conductivity (or resistivity), permittivity and on
> frequency.
>
> Its not of great consequence. If you don't know the soil
> conductivity in your back yard just run some of it through
> your fingers and make a guess.
>
> To find skin HF depth of the soil use program SOILSKIN.
> Download from my website in a few seconds. Not zipped up.
> One small file only. Run immediately.
> --
> --
> Regards from Reg, G4FGQ
> For free radio design software go to:
> http://www.btinternet.com/~g4fgq.regp
> --

3737. Re: WARNING: BOGUS ROT13

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D538C7.A70FF3F7@mindspring.com>
Source record: 178920

william ewald wrote:

> On Fri, 29 Sep 2000 02:05:13 -0400, "David J. Windisch"
> <davidw@copper.net> wrote:
>
> >SPUGM
> >
> >K3BHJ
> >
>
> FCHTZ?

Thrff genafcbfvgvba vf gbb gbhtu. <fueht>

3738. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <hidats04nl9gbgof72drsn6odt4q7ri2go@4ax.com>
Source record: 178921

On Wed, 27 Sep 2000 17:54:29 -0500, "William E. Sabin" <sabinw@mwci.net> wrote:
>The thing that is consistently (conveniently) ignored is that even if the tuner
>is completely lossless, a conjugate match at the output of the tuner cannot be
>achieved *unless* conjugate match at the output of the PA is also achieved. In
>other words (in the above example), unless the output impedance of the PA is 50
>ohms pure resistance. The validity of even a "theoretical" conjugate match in
>the system is based on this crucial premise.
>
>That 50 ohms output resistance is achieved in certain carefully rigged
>experiments, or if the PA is designed specifically to have a 50 ohm output
>resistance, for example by the use of negative feedback. In 95% or more of PA's
>used for amplitude-varying radio communication (AM, SSB, PSK31 etc) there is no
>assurance of this whatsoever in vac tube or xistor PAs.
>
>I suppose there are cases where conjugate match is important. But as a bare
>minimum you had better be damned sure the PA output Z is 50 + j0 ohms. And that
>does not happen by decree or wishful thinking.
>
>I have seen all of the stultifying, mind-numbing rhetoric that tries to convince
>me that the output Z is, in fact, "assured" to be 50 ohms resistive. It is junk
>science.

Amen, Bill. The notion that the "load line" is anything other than the transformed impedance of the *load* presented to the tube or transistor is indeed junk science. That's where I parted company with Walt and those who supported him. He, or one of this supporters, said in effect that the load line *was* the input termination of the network. But in fact it is just the transformed presentation of the load *to* the active device. That's a very different thing. His view is metaphorically similar to stating that the image formed by a lens *is* the object itself rather than a projection of it.

I also parted company with Walt when he claimed that a reflection could be generated from a superpose impedance. By definition, waves in superposition can't affect each other. They pass unaltered through any point of superposition. To say otherwise is to misuse the wave mechanics model at a fundamental level. Reflections can only occur from a physical impedance discontinuity in the medium propagating the wave. Unless that is a physical short or open, a total reflection cannot occur.

In the purely theoretical "steady state" (which would take infinite time to achieve), the sum of an infinite series of partial reflections can produce a result which may *appear* in some respects the same as a total reflection, but it isn't physically the same as a total reflection. To treat it as if it were is a conceptual error.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net

534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3739. Copyright problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D53D38.4C751E2F@hiwaay.net>
Source record: 178922

In perusing the Book, "Fractals Everywhere" by Michael Barnsley,
(Academic Press, 1988, ISBN 0-12-079062-9) I came across a figure that,
it appears, Chip is selling as a ground plane for one of his antennas.
It is a Sierpinski triangle, and it looks like Chip has simply copied
this onto PC board and etched the pattern.

I wonder if he realizes this is a copyrighted figure, and from a book
that pre-dates his use?

Bill-W4BSG

3740. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d53f32.17709010@news.akorn.net>
Source record: 178923

On Fri, 29 Sep 2000 19:00:15 -0500, CAM <cam2338@bigfoot.com> wrote:

>Gary killfiled me because he couldn't stand to hear IEEE
>definitions including the one for "Power Flow Vector". :-)

Hi Cecil,

I've installed a killfile also, but you aren't in it. Actually only
one person is, and the people who commonly only respond to him.

I now get ten posts a day, instead of a hundred.

I've never noticed that you get out of line or make childish remarks.
That certainly isn't true with the main "person" in my kill file...who
I hope will sue me someday soon as he promised.

73 Tom

3741. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r3fodnqf1@bob.news.rcn.net>
Source record: 178924

Correction: to get to it:
ftp://eznec.com/pub/MI2/

3742. Re: Copyright problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r3gho$1bi$1@bob.news.rcn.net>
Source record: 178925

Interesting... I took my morning dump and when
I looked in the bowl, there was a fractal shape !!!
Is chip going to sue the shit out of me too?

3743. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <13398-39D53DEE-17@storefull-113.iap.bryant.webtv.net>
Source record: 178926

Cecil, W6RCA wrote:
"(IEEE) dissipation-loss of electric energy as heat. It`s not always undesirable. It`s how I heat my house in the winter."

Carramba! The California Kilowatt! Viva the Radar Rancho!

Best regards, Richard Harrison, KB5WZI

3744. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D54E48.345E2CCD@oio.net>
Source record: 178927

Fractenna,
Why don't you take your silliness somewhere else for a while?
All of this crap is really getting old. If your going to sue him,
them sue him. I certainly don't need to hear about it, and I really
doubt if anyone else wants to either.
Pesonally, I don't see how you can stand to look at yourself
in a mirror...
'Doc

3745. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D54EE6.A0983973@oio.net>
Source record: 178928

Wayne,
Your correct about the impedance changing with the angle of
the dipoles legs. With an enclosed angle of 90*, the input impedance
isn't going to be 50 ohms, need a larger enclosed angle for that.
'Doc

3746. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <ngjatsggo937e5fsrl26c3qe9efjeci21u@4ax.com>
Source record: 178929

On 29 Sep 2000 11:19:05 GMT, w1rfi@aol.com (W1RFI) wrote:
>>From: Gilbert Mouget
>
>>Important notice:
>
>>This poster, Fractenna, has, in my
>
>These repetitive posts being "offered" by several participants here serve no
>purpose other than to attempt to anger Chip. They do more than disrespect Chip;
>they disrespect every participant here.
>
>To those that are doing them, could you please stop?

They aren't going to stop, Ed. Just put Gilbert, and anyone else
who posts this sort of repetitive abuse, in your killfile. They
don't have anything useful to contribute to antenna discussions
anyway, so it is no great loss.

So far today I've added 12 names to my killfile for this group
because they've responded to Wacky Fracky's trolls. It sure
makes reading the group more pleasant. The only one in the
killfile I'll really miss reading is W8JI, but so many of his posts
are just baiting of Chirp that he had to go.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3747. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r3jdh$k2c$1@bob.news.rcn.net>
Source record: 178930

```
When he looks in the mirror, he sees
the most beautiful person he has ever seen....
that's the problem...
```

3748. Re: Yagi or Log Periodic? Beginner question!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <7okatscf5gp1967hrh5msi50g4pbd74igf@4ax.com>
Source record: 178931

On Fri, 29 Sep 2000 20:00:11 GMT, "alex" <A_L_E_X1@yahoo.com> wrote:
>Hi everyone!
>
>I want to make my own antenna (i surely can buy one in radio shack but i
>want to make something with my hands). That antenna have to capture the
>following freqs:
>
>Channel Freq
>02 55.25 --> important
>06 83.25 --> important
>10 193.25 --> important
>12 205.25 --> important

You could cover this entire group with a single wideband log periodic
antenna mounted on a rotator (just copy one of Radio Shack's antennas
if you want to build it, their designs are good). But for best results you'd
do better to build a log periodic for ch 2, and second one for ch 6 (necessary
on these two channels to get enough bandwidth), and yagis for ch 10 and
ch 12 (yagis are broad banded enough on these frequencies to pass the TV
channel). I'd suggest a 5 element log for ch 2, an 8 element log for ch 6, and
11 element yagis for each of ch 10 and ch 12. This will give you better gain
distribution, and the ability to point each antenna precisely at the desired
station. You can copy Channel Master single channel MATV antennas if
you want to build these.

>17 489.25
>29 561.25
>33 585.25
>35 597.25 --> important
>44 651.25 --> important
>46 663.25 --> important
>57 729.25
>62 759.25

For the UHF channels, it is hard to beat a corner reflector, though stacked
bowties would run a close second. These antennas are quite broad band
at these frequencies, so you could do it with one, though you might want to
use several in order to point them precisely at the desired stations. If you
want to build these, just copy the Radio Shack design (or for a more rugged
design, copy Channel Master's MATV corner reflector).

Note that you can't just combine these antennas, that would cause
undesireable interactions. (Each antenna will pick up *some* signal
on every channel, combining them at RF would cause destructive
interference to their patterns, ie loss of gain and possibly ghosting

problems.) You could bring each one to a single channel receiver, demodulate it, and remodulate it to a "house" cable frequency. That would prevent any destructive interference among their patterns by breaking RF coherence on the cable.

This is the way MATV systems are built, but it would require considerable "head end" equipment (you could likely find what you need cheap at a large hamfest such as Dayton). Antenna switching would be simpler, but all the sets in your house would have to watch the channel whose antenna is switched up at the moment unless you built a crossbar switcher or used a patch panel to assign a particular antenna to a particular TV set. This would be inconvenient.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3749. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39d55a87$0$1357$45beb828@newscene.com>
Source record: 178932

How about just creating rec.radio.amateur.antenna.fractal
for those who want to discuss this topic and leave rec.radio.amateur.antenna
for "conventional" antennas?

In article <8r3jdh$k2c$1@bob.news.rcn.net>, coneal@ultranet.com says...
>
>When he looks in the mirror, he sees
>the most beautiful person he has ever seen....
>that's the problem...
>
>

3750. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D55ECD.F86C02E5@bigfoot.com>
Source record: 178933

Tom W8JI wrote:
> I've never noticed that you get out of line or make childish remarks.

For Gary, getting out of line and acting childish means catching
him in a mistake. Some I recall are:

There's no such thing as reflected power so it cannot cause
ghosts in a TV receiver. Reflected current cannot flow upstream
against forward current. There's no power in an energy pulse even
if the voltage and current are in phase. An energy pulse with a
vertical leading edge is possible, i.e. joules/second are infinite.
Power does not move from the power generator through the distribution
system to the load. Power cannot be measured entering and exiting a
boundary drawn around a system. If work is not done then power doesn't
exist. Remember those arguments?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3751. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D56170.CD3ED4DC@bigfoot.com>
Source record: 178934

klocko@toad.net wrote:
> ... but powers (which are dot products of voltage and current)
> don't combine.

But of course, scalars are easier to combine than vectors/phasors.
You just dump them in a bucket. If you know the number of seconds
in the transmission line, you can convert watts to joules and the
conservation of energy principle certainly applies. Consider a
transmission line one second long with reflections and a Z0-match.
Calculate the joules in the waves. The forward energy will equal
the generated energy plus the reflected energy. Assuming lossless
conditions, all energy generated by the generator and not radiated
or dissipated by the load is still in the transmission line.
--
http://www.mindspring.com/~w6rca

3752. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D5682F.F49CA639@mindspring.com>
Source record: 178935

Gilbert Mouget wrote:

> Sat, 30 Sep 2000 01:37:06 GMT dans l'article
> <jrgatscprinr0p6sno48vso84ti26l5qks@4ax.com>
> l'honorable Pissed off Ham <NoWay@Hoser.net> escrivit :
>
> :On Fri, 29 Sep 2000 18:00:41 -0500, Bill Aycock <baycock@hiwaay.net>
> :wrote:
> :>> under:
> :>> http://www.sbirsttr.com/Awards/SrchResultsDtlsForm.asp?RanNo=8
> :check the link again, its gone
>
> The site use cookies.
>
> You must start a new search http://www.sbirsttr.com/Awards/Default.asp
>
> With the words "fractal" and "antenna"
>
> 73
>
> --
> Gilbert.

And Chipper wasn't the only one to get such a grant.

Program:
SBIR
Agency:
DARPA

Field

Office:

STO
TOPIC
Number:
DARPA99-021

Control

Number:

99SB10342
Contract
Number:
DAAH0199CR131

Phase:

1
Awarded
In:
99

Award

Amount:

$97,636
Award Start
Date:
06APR99

Award

Completion

Date:

01DEC99

Proposal
Title:
Printed Circuit Fractal Loop Antenna for
Ultra-Wideband Airborne Sensors

Principal
Investigator
Name:
L. Susman
Principal
Investigator
Phone:
202-223-8808

Firm

ADVANCED POWER TECHNOLOGIES, INC.
1250-24th Street, NW, Suite 850
Washington, DC 20037

Woman Owned: N
Minority Owned: N
Number of Employees: 60

Keywords:
ULTRA-WIDEBAND ANTENNA; FRACTAL ANTENNA;
PRINTED CIRCUIT

Abstract:
This proposal addresses the problem of
creating a low profile antennaof relatively small
electrical size that can be made conformal

and integral to a variety of airborne structures and yet achieve wide band performance. As the candidate for low-profile/conformal antennas for ultra-wide band airborne sensors, APTI proposes the Printed Circuit Fractal Loop (PCFL) Antennas. The PCFL antenna has novel and other attractive features in addition to the wide band common to regular fractal antennas: 1) Constant phase center makes them a better wide band element for phased arrays or for designing circular polarized antennas for satellite communications; 2) Can be configured as a single ultra-wide band or multi-wide band antenna; 3) Easy to manufacture using printed circuit technology; 4) Readily conformal to airframe structure; 5) Lowprofile and light weight. Phase I study will focus on: 1) Numerical modeling and simple prototype validation of various designs; 2) Comparative and trade study of system and mechanical performance on differentdesigns; 3) Optimized paper design for Phase II fabrication and testing.

3753. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: KC0HAK <warrenwu@uswest.net>
Message-ID: <fZdB5.2286$lh1.371306@news.uswest.net>
Source record: 178936

Richard Clark wrote in message ...
>On Fri, 29 Sep 2000 02:21:37 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:
>
>>
>> 29 Frc 2000 02:03:12 TZG qnaf y'negvpyr
>> <20000928220312.22419.00000081@at-qn1.nby.pbz>
>> y'ubabenoyr Senpgraan <senpgraan@nby.pbz> rfpevivg :
>>
>>:Jryy, gura fubj hf jung gur 'ubnk' vf. Jung'f fgbccvat lbh?
>>:
>>:V jnf hanoyr gb ybpngr gur svyrf lbh zragvbarq.
>>:
>>
>>V nz abg tbvat gb qb lbhe ubzr jbex sbe lbh.
>>Lbh jrer hanoyr gb ybpngr gur zragvbarq svyr orpnhfr gur fhowrpg
>>vf ctc rapelcgrq jvgu frperg senpgny ebg13 (cngrag craqvat)
>
>Uv Tvyoreg,
>
>Guvf vf gur svefg gvzr va fbzr 4 lrnef V'ir frra ebg13 hfrq urer. ubj zhpu
cebcntngvba
>qrynl jvyy guvf rkuvovg sbe gur nirentr cuq?
>
>73'f
>Evpuneq Pynex, XO7DUP

Uv nyy,

Lbh xabj, jura V jnf n yvggyr xvq, V unq n Fcvqrezna Rapbqre/Qrpbqre evat
gung V tbg sebz n prerny obk!

V'z 16 abj; n whavbe va uvtu fpubby. V pna svther vg bhg va 30 frpbaqf,
yrg'f frr ubj ybat vg gnxrf n CUQ
gb svther vg bhg.

73'f

Jneera, XP0UNX

3754. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D54D4C.3680@pacbell.net>
Source record: 178937

klocko@toad.net wrote:

>
> If I have time I'll go thru your numbers, but the original question was
> does 100 watts + 100 watts equal 200 watts. If there are two sets of
> waves (take the 2 backward traveling and the 2 forward traveling),
> you're equating (E1+E2)*(I1+I2) to E1*I1 + E2*I2. Voltages combine
> vectorially, currents combine vectorially, but powers (which are dot
> products of voltage and current) don't combine.
> Bill N3WK
>

I thought voltages, in the form of E1 and E2 above were complex
numbers, not vectors. You can do more ordinary type arithmetic
with complex numbers than you can with vectors (division of one
vector into another is not allowed using three dimensional
vectors, also, the cross product of two vectors is not commutative.)
I was also under the impression that voltage was always a scalar
quantity, since E=-delV, where E is a vector and V is a scalar,
so I thought it was impossible to take the dot product of V and I.
Of course, you can always just multiply them using the rules that
apply to complex numbers. Is that what you have in mind? If
you guys are going to start talking about fields, vectors and
power, you might want to get a book on electromagnetics and read
through the part on the *divergence* of the Poynting Vector. I
believe you'll find it very illuminating.

Tom Donaly KA6RUH

3755. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D5528F.1B7C@pacbell.net>
Source record: 178938

Gary Coffman wrote:

>
> In the purely theoretical "steady state" (which would take infinite time to achieve),
> the sum of an infinite series of partial reflections can produce a result which may
> *appear* in some respects the same as a total reflection, but it isn't physically the
> same as a total reflection. To treat it as if it were is a conceptual error.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

It may, indeed, be a conceptual error, such as treating hydraulic fluid as a liquid when everyone knows it's just a collection of molecules. However, you may want to read the text, Field and Wave Electromagnetics, by David K. Cheng, where he reduces all the small reflections to a closed form expression using the binomial theorem -although he doesn't explicitly identify the binomial theorem as such- which gives expressions for voltage and current -sinusoidal- at any point on a transmission line. It probably won't convince you Walt is right, but it should give you food for thought.

73

Tom Donaly KA6RUH

3756. Re: N1IR OPEN HOUSE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r1lfg$u8e$1@slb7.atl.mindspring.net>
Source record: 178982

Thread:

For the record, I have made a statement of my professioanl affiliations elsewhere in/on this NG.

Since such information is a complete non sequitor and of no practical use to anyone, I don't care to waste my time pointing out to everyone where to find it, just look it up in the archives yourselves.

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20000928082948.11146.00000002@ng-ci1.aol.com...
> >
> >NC means "Not Closed"!
> >
> >This thread is...
> >
> > Peter K1PO
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20000924134227.07667.00000587@ng-fc1.aol.com...
> >> >
> >> >Fractenna <fractenna@aol.com> wrote in message
> >> >news:20000923145257.17845.00000559@ng-fm1.aol.com...
> >> >> >Anyone with half a brain would realize that it is not, even if only
by
> >> >the
> >> >> >continuous "This thread is closed" messages posted by yourself.
> >> >> >
> >> >> >Now go home and use the bathroom instead of peeing in the sandbox.
> >Leave
> >> >the
> >> >> >use of the newsgroups to adults.
> >> >> >
> >> >> >"Fractenna" <fractenna@aol.com> wrote in message
> >> >> >> This thread is closed.
> >> >> >>
> >> >> >> NC
> >> >> >
> >> >> >
> >> >> This thread is closed.
> >> >>
> >> >> NC
> >> >

> >> >Just gotta have the last word don't ya.....
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >> >
> >>
> >> This thread is closed.
> >>
> >> NC
>
>
> Hi Peter!
>
> I wonder if you could tell us what your job is, and who you represent in
that
> capacity. It would make a most interesting contextual statement.
>
> 73
> Chip n1IR

3757. Re: Richly-deserved Recognition

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r1ltaiav1@nntp9.atl.mindspring.net>
Source record: 178983

David:

Great job.

I'm sure glad that you are keeping score.

Peter K1PO

"David J. Windisch" <davidw@copper.net> wrote in message
news:gFGy5.289$HK6.1671@newsfeed.slurp.net...
> Some ones intoned:
>
> > DO NOT RESPOND TO TROLLS!
> >============================
> >This begs the question "How does one recognise a troll ?"
>
> Hmmmmm ...
>
> Lately we've had:
>
> 1) the cancellation of the talk paranoia;
>
> 2) the open house paranoia;
>
> 3) the twisting, bending fractal challenge rules;
>
> 4) the decibel perversion.
>
> 5) 3 threats to sue in one thread in less than 12 hours.
>
> 6) the theif (sic) nitwittery
>
> 7) the jerk-of-a-colleague name-calling biz
>
> 8) the beta-test farce
>
> 9) the $1000 shell game
>
> 10) the DXCC disHONOR ROLL fracas
>
> 11) open house II
>
> 12) death threat II
>
> 13) the MI2 blast

>
> 14) imabetteropthanyou,youchickenneederneederneeder
>
> 15) the crap goes on interminably in the archives ...
>
> Get it?????
>
> These are TROLLS!!!!!!!!!!!!!!!!!!!! f-word trolls!!!!!!!!!!!!!!!
>
> That *should* be PATENTly obvious.
>
> DO NOT ANSWER F-WORD TROLLS.
>
> Dave, K3BHJ
>
>
>
>
>
>

3758. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r1qgg$849$1@plutonium.btinternet.com>
Source record: 178984

Reg Edwards wrote:
>
> The design load impedance presented to the
> amplifying device is
>
> (Peak Voltage Rating) / (Peak Current Rating) ohms
>
> without any reference to what the internal
> impedance of the device might be.
>
> Any amateur who has ever designed his own HF PA knows
that.
==========

It appears some people are still of the opinion that when a load equal to the design load, as described above, is connected to a generator a conjugate match occurs. This is patently untrue.

For example, a linear PA which is effectively a current source, controlled by its grid, base or gate voltage, having a very high internal resistance, has peak voltage and current ratings from which its optimum design load, a relatively low resistance, can be calculated. The two resistances are unrelated to each other.

So a conjugate match occurs extremely rarely. When it does occur it occurs merely by chance. The internal resistance does not enter into the circuit designer's load resistance calculations. He has no need to know. He usually doesn't.

It follows that calculations of the performance of amateur tuners + lines + antennas, based on the existence of a conjugate match at some point in the system, are invalid.

But don't lose any sleep about it. Without any knowledge of the internal impedance of your black transmitting box the more simple and exact calculations are available..

Reg, G4FGQ

3759. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D47275.982423B6@mwci.net>
Source record: 178985

Dick Carroll wrote:

> William E. Sabin wrote:
>
> > The Conjugate Match Theorem means exactly and precisely what it says:
> >
> > "If a group of four terminal networks containing only pure reactances are
> > arranged in tandem to connect a generator to a load, then if at any junction
> > there is a conjugate match of impedances, there will be a conjugate match of
> > impedances at every other junction in the system".
> >
> > We are not allowed to play any games with this. It is complete and covers all
> > contingencies. There are no exceptions.
>
> So it appears the Conjugate Match Theorem is useless in describing any real-world
> network, since there exists no such thing as a completely lossless four terminal
> network that I am aware of. It is not to be used outside the realm of theory.
> Otherwise it's only useful application would seem to be exactly as Walt Maxwell has
> utilized it - to approximate what happens.

The theorem defines a basic principle. Ohms law is a similar basic principle, but we all use it in an approximate manner, for example 1.2452 volts divided by 3.4871 ohms is "about" 0.36 amperes.

But before we use approximations, we must realize what basic principles we are dealing with and what their limitations are.

Bill W0IYH

3760. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000929071905.19626.00000132@ng-cu1.aol.com>
Source record: 178986

>From: Gilbert Mouget

>Important notice:

>This poster, Fractenna, has, in my

These repetitive posts being "offered" by several participants here serve no purpose other than to attempt to anger Chip. They do more than disrespect Chip; they disrespect every participant here.

To those that are doing them, could you please stop?

Thanks.

73,
Ed Hare, W1RFI

3761. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000929073005.19626.00000133@ng-cu1.aol.com>
Source record: 178987

>From: richardharrison@webtv.net (Richard Harrison)

>At some value between a short and an open there is a load resistance
>which permits maximum power to be extracted from the generator (the
>transmitter) and delivered to that load resistance.

True enough, but most amplifiers are not designed to that parameter. They are designed to operate with acceptable distortion and within the safe ratings of its components and power supply into a specific load. Distortion and not blowing up are more important than the load that permits maximum extracted power.

73,
Ed Hare, W1RFI

3762. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000929073440.19626.00000134@ng-cu1.aol.com>
Source record: 178988

>From: sideband@mindspring.com

>Did you guys see my post last sunday where I said I found the problem
>and got it down to 1.4:1 ? Just wondering. :-)

Yes, I did. :-) I think it is called thread drift. :-)

73,
Ed Hare, W1RFI

3763. Re: Poor QEX editing?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <39d482f3.5674111@news.crosslink.net>
Source record: 178989

On Wed, 27 Sep 2000 08:57:08 -0500, CAM <cam2338@bigfoot.com> wrote:

>Fractenna wrote:
>> The issue of a conjugate match is an excellent example. Shall we now claim it
>> isn't possible because you can't get 'negative resistance'?
>
>If we are transferring the absolute maximum amount of power,
>is there a conjugate match by definition?
>--
>http://www.mindspring.com/~w6rca

You have to start with a "power limited" device.
Once you have a power limited device, then you can decide whether or
not you are transferring "maximum available power" to the load - and
if you are, you will then have a conjugate match, by definition.

73 de Bob, W9DMK, King George, VA
Change "nobody" to "w9dmk" for e-mail
http://www.qsl.net/w9dmk
http://www.fortunecity.com/meltingpot/albania/784

3764. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d48311.9207373@news.akorn.net>
Source record: 178990

On Thu, 28 Sep 2000 23:36:56 -0500, CAM <cam2338@bigfoot.com> wrote:

>"J. Mc Laughlin" wrote:
>> That is about what a group of our faculty who teach circuits
>> decided. It is interesting, but practical uses are few. Little, if
>> any, time is spent on the theorem any more. It might be mentioned as
>> an example of intellectual excess as it was misused (some time before
>> I was born) to prove that electrical power plants could not be built -
>> half the power generated would be dissipated in the power house
>> resulting in melted power houses. [I understand the error of this as
>> well as you do!]
>
>So what's to keep us hams from running our generators like the power
>company runs theirs? Exactly what is wrong with high efficiency?

Hi Cecil,

Generators and alternators are normally operated at or close to a
conjugate match. Everything is done to keep them that way, and we are
in big trouble if they are not!

Generators and alternators automatically have their source impedance
adjusted to match the load impedance through the feedback loop caused
by the load sensing system that controls the field winding.

Even the energy source driving the generator winds up being controlled
to match the load by the generator, impedance limited of you will.

The power house is a good example of how maximum efficiency occurs
when an energy source and load are matched to each other.

73 Tom

3765. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ka0B5.59$3J.6923@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178991

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D41991.4190DCE0@bigfoot.com...
> VE9SRB wrote:
> > The only energy "joining" the forward traveling wave is the energy that
is
> > partially re-reflected at the point of reflection, which, in the case of
the
> > tuner, is not at the match point.
>
> 100w-->--51.5 ohm coax--x--1/4WL 300 ohm line--51.5 ohm load
>
> P+
> --->100w--->----x---->200w----->-----+---51.5 ohms
> Pg ^ | 100 w
> | | Prad
> +----<--100w--<------+
> P-
>
> In fixed format, values chosen to make P- = P+/2
> 100 watts generated, 100 watts reflected, 200 watts forward at the
> Z0-match point. It certainly appears that the reflected energy can
> be considered to have reversed direction and joined the generated
> energy on a trip back to the antenna. There is no tuner and the
> Z0-match is a point. There are no reflections to the left of the
> Z0-match point and reflections exist to the right of the Z0-match
> point.
>
> > I told Walt that I would not debate these particular points on usenet
again.
>
> Why? It's a simple concept. Pg+P- = P+. 100+100=200. Why are you
> afraid to discuss it in public?
>
> > Would you prefer to take this topic offline?
>
> Nope! That takes all the fun out of it. :-)
> --
> http://www.mindspring.com/~w6rca

3766. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Yd0B5.63$3J.7534@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178992

Let's try this again.

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D41991.4190DCE0@bigfoot.com...

>
> 100w-->--51.5 ohm coax--x--1/4WL 300 ohm line--51.5 ohm load
>
> P+
> --->100w--->----x---->200w----->-----+---51.5 ohms
> Pg ^ | 100 w
> | | Prad
> +----<--100w--<------+
> P-
>
> In fixed format, values chosen to make P- = P+/2
> 100 watts generated, 100 watts reflected, 200 watts forward at the
> Z0-match point. It certainly appears that the reflected energy can
> be considered to have reversed direction and joined the generated
> energy on a trip back to the antenna. There is no tuner and the
> Z0-match is a point. There are no reflections to the left of the
> Z0-match point and reflections exist to the right of the Z0-match
> point.
>
> > I told Walt that I would not debate these particular points on usenet
again.
>
> Why? It's a simple concept. Pg+P- = P+. 100+100=200. Why are you
> afraid to discuss it in public?
>
> > Would you prefer to take this topic offline?
>
> Nope! That takes all the fun out of it. :-)
> --
> http://www.mindspring.com/~w6rca

Cecil:

I will respond later this weekend on the example but ask you think about
this for now:

100 watts + 100 watts does not "add" to become 200 watts. This would only
be true if the voltages associated with each power were 90 degrees out of
phase. If the voltages were in phase, 100 watts plus 100 watts would add to
become 400 watts. The voltages in a transmission line are complex and add
as vectors. Vtotal = V1 + V2 (adding as vectors). Ptotal = |Vtotal|^2 / Z.

Assuming Z is a pure resistance.

Get back to you on the rest later.

Steve

3767. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <9293-39D4934E-12@storefull-111.iap.bryant.webtv.net>
Source record: 178993

Reg wrote:
"So a conjugate match occurs extremely rarely. When it does occur, it occurs merely by chance."

In general, Reg Edwards is right. Someone could contrive a match by working at it.

The designer picks a safe voltage for his output devices. That peak voltage is determined by the supply he uses.

Later, the designer picks a minimum load impedance to limit the current to that which his devices will withstand.

So, as Reg says, the peak volts and amps determine the load resistance. The load for maximum rated output is is peak volts divided by peak amps.

The maximum rated power output becomes the peak volts times the peak amps divided by two.

Best regards, Richard Harrison, KB5WZI

3768. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <bH0B5.1835$ai4.315467@news.ntplx.net>
Source record: 178994

Dick Carroll <dixie@townsqr.com> wrote:

> So it appears the Conjugate Match Theorem is useless in describing any real-world
> network, since there exists no such thing as a completely lossless four terminal
> network that I am aware of. It is not to be used outside the realm of theory.
> Otherwise it's only useful application would seem to be exactly as Walt Maxwell has
> utilized it - to approximate what happens.

It is much like the poser offered to mathematics students: You are standing 10 feet away from the most beautiful woman in the Universe. Every minute, you cut the distance between you by half. How long will it take you to reach her? The accurate answer is, given by people who understand the math, is that you will never reach her. The engineering student, however, may answer that after 30 minutes, you are close enough for all practical purposes. :-)

73,
Ed Hare, W1RFI

3769. Re: no new postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D481D2.634FF739@dvol.com>
Source record: 178995

william ewald wrote:

> On Thu, 28 Sep 2000 15:22:08 GMT, fjones@ionet.net (frank jones)
> wrote:
>
> >Thanks all for your replies. The problem was with Forte Free Agent.
>
> I've found the registered version well worth the price.

>
I'm running Netscape Messenger and it stinks but Outlook is even worse.
Usta run Free Agent and I keep telling myself I gotta pop the $30 for the
real thing. I've noticed an oddity: It appears that differerent
newsreader programs dial up different upstream news servers. Posts and
threads seem to expire much more quickly when using Messenger and Outlook
than when using Free Agent. Beats me . .
>
Brian Kelly w3rv

3770. Re: Standards

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <n569tsstarcto5din3divrp1co1cqqmler@4ax.com>
Source record: 178996

On Fri, 29 Sep 2000 02:35:03 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:

>:No, that's a canard put out by the left-wing media. Actually, NIST
>:just calls me up now and then and asks "what time is it now, Bill?"
>:and readjusts their clock accordingly.
>
>"what time is it now, Bill?"
>
>Tnx & 73
>--
>Gilbert.

Two freckles past scratch. Same thing I told them.

73, Bill W7TI

3771. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d4983a.14624263@news.akorn.net>
Source record: 178997

On Fri, 29 Sep 2000 09:19:44 -0400, "Ed Hare, W1RFI" <w1rfi@arrl.net>
wrote:

>It is much like the poser offered to mathematics students: You are standing
>10 feet away from the most beautiful woman in the Universe. Every minute,
>you cut the distance between you by half. How long will it take you to
>reach her?

I was never all that good at division, but I was good at multiplying.

The woman would open her arms, and I would proceed to do what I was
best at.

73 Tom Juan de Marco If you know who can be the world's greatest
antenna designer I can certainly be the world's greatest lover)

3772. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8r26q3$hb2$1@iac5.navix.net>
Source record: 178998

Ed: I normally find myself in agreement with most of what you write, in this case however I respectfully disagree. Chip has shown disrespect to nearly every member of this newsgroup. The postings are analogous to a caution light at a dangerous intersection. Those that live in the neighborhood know to slowdown because of the hazards. The casual traveler through the neighborhood is unaware that the road is fraught with twists, turns, potholes, and other dangers. They need to be warned. Do you take down the caution light after today's traffic has seen it? Are you and others "disrespected" by a traffic light?

Respectfully Fred W4JLE

"W1RFI" <w1rfi@aol.com> wrote in message
news:20000929071905.19626.00000132@ng-cu1.aol.com...
> >From: Gilbert Mouget
>
> >Important notice:
>
> >This poster, Fractenna, has, in my
>
> These repetitive posts being "offered" by several participants here serve
no
> purpose other than to attempt to anger Chip. They do more than disrespect
Chip;
> they disrespect every participant here.
>
> To those that are doing them, could you please stop?
>
> Thanks.
>
> 73,
> Ed Hare, W1RFI
>

3773. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d49b51.15415278@news.akorn.net>
Source record: 178999

On Fri, 29 Sep 2000 12:50:00 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:

>100 watts + 100 watts does not "add" to become 200 watts. This would only
>be true if the voltages associated with each power were 90 degrees out of
>phase. If the voltages were in phase, 100 watts plus 100 watts would add to
>become 400 watts
>The voltages in a transmission line are complex and add
>as vectors. Vtotal = V1 + V2 (adding as vectors). Ptotal = |Vtotal|^2 / Z.
>Assuming Z is a pure resistance.

It sounds like you are saying the voltage doubles at a reflection, and
current doubles at the same time causing power to increase by four.

Can you explain in detail how that would happen?

73 Tom

3774. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D4A001.F93E472C@mindspring.com>
Source record: 179000

W1RFI wrote:

> >From: sideband@mindspring.com
>
> >Did you guys see my post last sunday where I said I found the problem
> >and got it down to 1.4:1 ? Just wondering. :-)
>
> Yes, I did. :-) I think it is called thread drift. :-)
>
> 73,
> Ed Hare, W1RFI

OK. I just didn't want anybody feeling like they were working hard to help me and then find out that, "that bastard fixed his problem and didn't say anything". :-) I am reading all of these posts and soaking in the theory. Thanks again for everyones help.

3775. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D4A748.E290D543@bigfoot.com>
Source record: 179001

VE9SRB wrote:
> 100 watts + 100 watts does not "add" to become 200 watts.

Since power is a scalar, of course it does. Power is a scalar
measured at a point past which energy flows.

> This would only
> be true if the voltages associated with each power were 90 degrees out of
> phase. If the voltages were in phase, 100 watts plus 100 watts would add to
> become 400 watts.

Nope, you forgot current. If the voltages are in phase, the currents will
be out of phase, keeping the 100+100=200 math consistentent. At a Z0-match,
the ratio of V/I must change because the Z0 of the transmission line
changes. Thus, when transistioning from Z0=50 to Z0=300, the voltage will
indeed increase but an exactly corresponding decrease in current will occur
which keeps energy conserved. Remember, reflected power has the voltage and
current 180 degrees OUT of phase. If the voltages add, the currents will
subtract (and vice versa).
--
http://www.mindspring.com/~w6rca

3776. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: W4JLE <w4jle@alltel.net>
Message-ID: <8r29iuikc1@iac5.navix.net>
Source record: 179002

Translation please...

"David J. Windisch" <davidw@copper.net> wrote in message
news:0bWA5.25001$3e2.3256@newsfeed.slurp.net...
> SPUGM
>
> K3BHJ
>
>

3777. FS: AT50 Kenwood autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: radiofreq0@aol.com
Message-ID: <20000929104438.01310.00000458@ng-md1.aol.com>
Source record: 179003

I have an AT50 auto tuner for sale. I just bought it used, it works a looks
great.
I have no need for it. I now have an HS1500 screwdriver and have no need for
it.
$250.00 plus shipping

3778. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <17917-39D4A7E1-26@storefull-115.iap.bryant.webtv.net>
Source record: 179004

Tom, W8JI wrote:
"Some of the original arguments were so flawed they were silly, like
those concluding conjugate match efficiency could only be 50%."

It may be silly to conclude, but the theory says a load equaling the
source resistance extracts maximum power. If source equals load, why
would efficiency not be 50%? Magical non-dissipative source resistance?

Best regards, Richard Harrison, KB5WZI

3779. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D4A935.7820446@bigfoot.com>
Source record: 179005

Tom W8JI wrote:
> It sounds like you are saying the voltage doubles at a reflection, and
> current doubles at the same time causing power to increase by four.

Methinks he forgot that reflected voltage is 180 degrees out of phase
with reflected current so if the voltage phasors add positively, the
current phasors will add negatively, i.e. subtract. Thus, the power
obeys the equation (N*V)*(I/N), i.e. for a constant amount of power,
if voltage is doubled, current is halved. Otherwise, the conservation
of energy principle would be violated.
--
http://www.mindspring.com/~w6rca

3780. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000929111344.19692.00000127@ng-cu1.aol.com>
Source record: 179006

Anyone who's operated 20-meter mobile using a center-loaded whip with a big cap hat on top can claim prior art. Hint: Next time, park next to the ocean.

Rick K1BQT

3781. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <rua2r8.t8o.ln@mail.specsol.com>
Source record: 179007

W4JLE <w4jle@alltel.net> wrote:
> Ed: I normally find myself in agreement with most of what you write, in this
> case however I respectfully disagree. Chip has shown disrespect to nearly
> every member of this newsgroup. The postings are analogous to a caution
> light at a dangerous intersection. Those that live in the neighborhood know
> to slowdown because of the hazards. The casual traveler through the
> neighborhood is unaware that the road is fraught with twists, turns,
> potholes, and other dangers. They need to be warned. Do you take down the
> caution light after today's traffic has seen it? Are you and others
> "disrespected" by a traffic light?

> Respectfully Fred W4JLE

> "W1RFI" <w1rfi@aol.com> wrote in message
> news:20000929071905.19626.00000132@ng-cu1.aol.com...
>> >From: Gilbert Mouget
>>
>> >Important notice:
>>
>> >This poster, Fractenna, has, in my
>>
>> These repetitive posts being "offered" by several participants here serve
> no
>> purpose other than to attempt to anger Chip. They do more than disrespect
> Chip;
>> they disrespect every participant here.
>>
>> To those that are doing them, could you please stop?
>>
>> Thanks.
>>
>> 73,
>> Ed Hare, W1RFI
>>

Since I started this (I think), I should probably get some of the heat.

I do think that those that chose to respond to the fractenna posts in this
manner should limit it to once per thread least we become "this thread is
closed" clones.

Jim Pennino

3782. Re: Car Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D4B527.C8563F9A@mindspring.com>
Source record: 179008
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf

Doesn't this put a lot of rf in the car?

Jeffrey Herman wrote:

> Guys, a compromise between glass-mounted and exterior-mounted
> antennas is this: Take the end of your feedline and remove about
> 19 inches of the outer cover; at that point separate the inner
> conductor from the copper braid and run them opposite to each other
> and perpendicular to the feedline, taping them to your rear window:
>
> inner cond. copper braid
> -------------||--------------
> ||
> ||
> || coax feedline
> ||
> ||
>
> It's nothing but a 2m dipole made entirely from the last 19 inches
> of your feedline, taped to your car's back window. If the horizontal
> orientation bothers you, run the two legs at a 45 degree angle from
> the vertex (where the conductors separate) with that point taped to
> the base of the window:
> \ /
> \ /
> \ /
> \ /
> \/
> ||
> ||
> ||
>
> No muss, no fuss, no damage to the car, and much better results than
> the glass-mounted "dummy load."
>
> It makes a fine indoor antenna at home, too; mount it as a vertical
> dipole taped to a window.
>
> 73, Jeff KH6O

3783. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D4B69F.14C96768@bigfoot.com>
Source record: 179009

Jim Pennino wrote:
> I do think that those that chose to respond to the fractenna posts in this
> manner should limit it to once per thread least we become "this thread is
> closed" clones.

This whole situation reminds me of a bunch of unsupervised two
year olds pi$$ing in the newsgroup instead of in their diapers.
--
http://www.mindspring.com/~w6rca

3784. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D4A0AC.6DEA@pacbell.net>
Source record: 179010

Ed Hare, W1RFI wrote:
>
> Dick Carroll <dixie@townsqr.com> wrote:
>
> > So it appears the Conjugate Match Theorem is useless in describing any
> real-world
> > network, since there exists no such thing as a completely lossless four
> terminal
> > network that I am aware of. It is not to be used outside the realm of
> theory.
> > Otherwise it's only useful application would seem to be exactly as Walt
> Maxwell has
> > utilized it - to approximate what happens.
>
> It is much like the poser offered to mathematics students: You are standing
> 10 feet away from the most beautiful woman in the Universe. Every minute,
> you cut the distance between you by half. How long will it take you to
> reach her? The accurate answer is, given by people who understand the math,
> is that you will never reach her. The engineering student, however, may
> answer that after 30 minutes, you are close enough for all practical
> purposes. :-)
>
> 73,
> Ed Hare, W1RFI

Yes, and I'd be there in three minutes, because, after three minutes,
she'd be close enough to make me say to hell with the damn problem.
Why would an engineering student wait so long? The series converges
very quickly.

Tom Donaly KA6RUH

3785. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39D4B994.270AA391@wb6hqk.ampr.org>
Source record: 179011

Tom W8JI wrote:

> Generators and alternators are normally operated at or close to a
> conjugate match. Everything is done to keep them that way, and we are
> in big trouble if they are not!

I disagree.

> Generators and alternators automatically have their source impedance
> adjusted to match the load impedance through the feedback loop caused
> by the load sensing system that controls the field winding.

The output impedance of a generator, defined as the rate of change of output voltage with respect to a change in output current, is determined entirely by the output voltage regulator feedback loop characteristics. In most simple systems like automotive alternator/regulator systems and small power plants, the loop gain, and therefore output impedance, is essentially constant over most of the operating range. A slightly better approximation is that the loop gain decreases, and therefore output impedance increases, as the output current rises and the field begins to saturate.

Usually where there is only a single generator involved and the transmission network is small, the voltage regulation loop gain is set as high as possible while insuring unconditional stability for all likely load characteristics and throttle settings. The result is the lowest possible output impedance (greatest stiffness) consistent with overall stability. This condition has nothing to do with a conjugate match.

In some systems such as small construction power plants powered by an integral internal combustion engine, the voltage regulation is sometimes compromised to reduce the likelihood a temporary overload (surge) will stall the prime mover.

More complex systems involving multiple generators interconnected through a transmission and distribution system having significant impedance (inductance) require a more sophisticated approach towards insuring system stability. In some cases, the voltage regulation loop of (some) of the individual generators is, for practical purposes, opened, and either power or current becomes the regulated variable.

> The power house is a good example of how maximum efficiency occurs
> when an energy source and load are matched to each other.

Ideally, large scale power generation systems are designed for the lowest possible operating cost over the life of the system. Sometimes

cost minimization is not optimal due to shortages of capitol or economic uncertainties having to do with the long term value of money. For various reasons, most of them obvious, a cost optimized power plant will consist of a generator and prime mover which peak in efficiency when operating at a power level somewhere between average and peak output power. As far as I know, this outcome has nothing to do with conjugate matching of the power plant to the load.

bart
wb6hqk

3786. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a10bef6.606139041@news.seanet.com>
Source record: 179012

On Fri, 29 Sep 2000 01:07:19 -0500, Pyr0x <Pyr0x@not.here.to> wrote:

>Ba Guh, 28 Frc 2000 20:52:20 -0700, Evpuneq Pynex
>//favc//
>>Uv Tvyoreg,
>>
>>Guvf vf gur svefg gvzr va fbzr 4 lrnef V'ir frra ebg13 hfrq urer. ubj zhpu cebcntngvba
>>qrynl jvyy guvf rkuvovg sbe gur nirentr cuq?
>
>Ojnunununununun
>
>Tbbq bar!
>
>V eneryl serdhrag guvf arjftebhc naq nz dhvgr nzhfrq ng gur "abvfr" va
>urer... Gung vf gbb shaal nobhg gur cuq naq ebg13, nygubhtu V org lbh
>ner ahgf ba va gung vg znl vaphe n "cebcntngvba" qrynl ;-]
>
>
>Ertneqf

Hi OM,

This seems a good opportunity to introduce the group to another form
of security - no not the encryption employed above (stumps the prof,
but most kids pick it up the second day they're on the net) but of a
new service on the internet.

That service comes to us courtesy of:
Anonymizer.com
Rewebber.de
Freedom.net

These sites offer the world a new way to secure a document to be
posted to the internet anonymously (if you choose).

So what? you might ask. But wait, there's more!

This document cannot be tampered with, it cannot be removed by any
agency, and it cannot be traced to you (if you so choose). In fact,
the server holding the document is wholly unaware that it is in
possession of it. Administrators cannot find it in their system, this
is impossible. You can destroy the server it resides in, and another
copy somewhere else will replace it automatically.

One may say that it is impossible to chip this security.

73's
Richard Clark, KB7QHC

3787. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d4c02e.24853143@news.akorn.net>
Source record: 179013

On Fri, 29 Sep 2000 09:32:01 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>It may be silly to conclude, but the theory says a load equaling the
>source resistance extracts maximum power. If source equals load, why
>would efficiency not be 50%? Magical non-dissipative source resistance?
>
>Best regards, Richard Harrison, KB5WZI

Nothing magical at all about a resistance that is non-dissipative Richard.

For example, if you remove the feedback from an alternator and fix the field excitation at a given value, and change the load, it behaves EXACTLY like the source is a "resistance limited" source except the dissipation involved is very very low (in a good alternator design).

No matter what the load, when feedback is restored, the alternator adjusts itself to supply the required amount of energy and no more....and does it without unwanted dissipative resistance. If you remove the feedback and fix the field at that flux level, a load pull will reveal the alternator is operating at the point where it's source resistance looks awful close to the load resistance.

Of course you could put a resistor in series with the output and do the same thing, but that wouldn't be smart.

Thank goodness we have non-dissipative parts of impedance, or we'd have some real power control problems that could only be solved by wasting a lot of energy!

73 Tom

3788. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d4c25a.25409598@news.akorn.net>
Source record: 179014

On Fri, 29 Sep 2000 08:47:32 -0700, Bart Rowlett
<bart@wb6hqk.ampr.org> wrote:

>power. As far as I know, this outcome has nothing to do with conjugate
>matching of the power plant to the load.
>
>bart
>wb6hqk

I disagree Bart, as per the example I gave Richard.

73 Tom

3789. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D4CE3A.E18646C@bigfoot.com>
Source record: 179015

Tom W8JI wrote:
> Thank goodness we have non-dissipative parts of impedance, or we'd
> have some real power control problems that could only be solved by
> wasting a lot of energy!

If radiation resistance were dissipative, we wouldn't even have to
bother with this newsgroup. :-)
--
http://www.mindspring.com/~w6rca

3790. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Reid Simmons <reid.w.simmons@intel.com>
Message-ID: <39D4CF1E.3D9A3B48@intel.com>
Source record: 179016

Gee, no SW receivers or transmitters huh? How did people justify their AM/FM radios, TVs, cordless phones, cell phones, wireless alarms, etc.?

I have lived in such situations and my policy has always been "what the neighbors don't know won't hurt them". I just ignore all the CC&R crap and do my own thing. Think "STEALTH". I found it to be great sport fooling the neighbors and condo asses (ooopps, I mean condo associations). Remember, those rules are written by people who, in general, tend to be from the lowest inellectual quartile and know virtually nothing about transmitters, receivers, antennas, "short" waves, "long" waves, frequency, etc., etc. In short, they're STUPID and can be fooled quite easily.

The house we now own has similar CC&Rs and I have a wire antenna farm plus a six meter beam on our property and I can run up to 1KW output. None of the neighbors even has a clue!

Like the Nike slogan says: "Just Do It".

Reid, K7YX

Gary Rotter wrote:

>
> I operated mobile when I lived in a condo. One of the CC&Rs prohibited
> operating a short wave reciver or transmitter!
>
> John Pinckney <longleaf@pop.erols.com> wrote in message
> news:39D27D2B.EBBAB261@pop.erols.com...
> > Ken,
> >
> > I'm in a similiar situation. I've had some luck with back-to-back
> Hamsticks for
> > 20 on my deck. And, I have have a helical going three stories, up a tree
> in my
> > backyard.
> >
> > GL/73
> >
> > John
> >
> > Firestone wrote:
> >
> > > I would like to appeal to the joint wisdom of this newsgroup to help
> > > me solve a problem.
> > >
> > > I live in a townhouse with the usual cc&r crap, so I am trying to put

> > > up the best antenna I can.
> > >
> > > The townhouse is 3 stories, levels, with the first (ground) level as a
> > > "basement." It has aluminum siding on the back, a rear deck on the
> > > second level, about 8 or 9 feet above the ground, and a minimal crawl
> > > space for an attic. My shack is on the third level, in the rear, but
> > > could be moved to the first level rear.
> > >
> > > So far I have had the most sucess with a random wire from the shack
> > > window to the deck rail (wood), along the rail, and then to a wood
> > > fence at the end of the property, total length approx 35-36 feet.
> > >
> > > Unfortunately, this setup is noticed by my next door neighbor, and I
> > > have to put it up, take it down, etc which will be a pain in the
> > > winter.
> > >
> > > Other things I have tried are hamsticks out the window with a single
> > > counterpoise wire, a dipole in the shack room for 15 meters, and an
> > > Isotron antenna on 15 meters. None of these has worked very well, and
> > > the 8 foot hamstick is a bit of a job to maneuver in a small room.
> > >
> > > I was wondering about putting antennas under the deck, random,
> > > shortened dipole, or loop, or any other ideas. The lowest band I want
> > > to work is 40 meters, and I am trying to do this at qrp
> > > levels. Moving, increasing power, and staying on vhf and above are not
> > > acceptable answers.
> > >
> > > --
> > >
> > >
> ==
> > > Ken Firestone, W3CAT | For every problem there is one solution
> > > ken@firestone.net | which is simple, neat, and wrong.
> > > kenf@clark.net | -- H. L. Mencken
> > >
> ==
> >

3791. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Reid Simmons <reid.w.simmons@intel.com>
Message-ID: <39D4D10B.A5D596E8@intel.com>
Source record: 179017

Gee, no SW receivers or transmitters huh? How did people justify their AM/FM radios, TVs, cordless phones, cell phones, wireless alarms, etc.?

I have lived in such situations and my policy has always been "what the neighbors don't know won't hurt them". I just ignore all the CC&R crap and do my own thing. Think "STEALTH". I found it to be great sport fooling the neighbors and condo asses (ooopps, I mean condo associations). Remember, those rules are written by people who, in general, tend to be from the lowest inellectual quartile and know virtually nothing about transmitters, receivers, antennas, "short" waves, "long" waves, frequency, etc., etc. In short, they're STUPID and can be fooled quite easily.

The house we now own has similar CC&Rs and I have a wire antenna farm plus a six meter beam on our property and I can run up to 1KW output. None of the neighbors even has a clue!

Like the Nike slogan says: "Just Do It".

Reid, K7YX

Gary Rotter wrote:

>
> I operated mobile when I lived in a condo. One of the CC&Rs prohibited
> operating a short wave reciver or transmitter!
>
> John Pinckney <longleaf@pop.erols.com> wrote in message
> news:39D27D2B.EBBAB261@pop.erols.com...
> > Ken,
> >
> > I'm in a similiar situation. I've had some luck with back-to-back
> Hamsticks for
> > 20 on my deck. And, I have have a helical going three stories, up a tree
> in my
> > backyard.
> >
> > GL/73
> >
> > John
> >
> > Firestone wrote:
> >
> > > I would like to appeal to the joint wisdom of this newsgroup to help
> > > me solve a problem.
> > >
> > > I live in a townhouse with the usual cc&r crap, so I am trying to put

> > > up the best antenna I can.
> > >
> > > The townhouse is 3 stories, levels, with the first (ground) level as a
> > > "basement." It has aluminum siding on the back, a rear deck on the
> > > second level, about 8 or 9 feet above the ground, and a minimal crawl
> > > space for an attic. My shack is on the third level, in the rear, but
> > > could be moved to the first level rear.
> > >
> > > So far I have had the most sucess with a random wire from the shack
> > > window to the deck rail (wood), along the rail, and then to a wood
> > > fence at the end of the property, total length approx 35-36 feet.
> > >
> > > Unfortunately, this setup is noticed by my next door neighbor, and I
> > > have to put it up, take it down, etc which will be a pain in the
> > > winter.
> > >
> > > Other things I have tried are hamsticks out the window with a single
> > > counterpoise wire, a dipole in the shack room for 15 meters, and an
> > > Isotron antenna on 15 meters. None of these has worked very well, and
> > > the 8 foot hamstick is a bit of a job to maneuver in a small room.
> > >
> > > I was wondering about putting antennas under the deck, random,
> > > shortened dipole, or loop, or any other ideas. The lowest band I want
> > > to work is 40 meters, and I am trying to do this at qrp
> > > levels. Moving, increasing power, and staying on vhf and above are not
> > > acceptable answers.
> > >
> > > --
> > >
> > >
> ==
> > > Ken Firestone, W3CAT | For every problem there is one solution
> > > ken@firestone.net | which is simple, neat, and wrong.
> > > kenf@clark.net | -- H. L. Mencken
> > >
> ==
> >

3792. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <28353-39D4CFBC-47@storefull-116.iap.bryant.webtv.net>
Source record: 179018

Tom, W8JI wrote:
"Generators and alternators are normally at or close to conjugate match."

I don`t think so. In power grids, machines close to the loads are combined to provide enough power to cope with the load and contingencies.

Nearly full loading of generators is more efficient than light loading, so machines are added and subtracted so that most are nearly fully loaded at nearly all times.

Maximum loading is set by temperature rise in the machine and has little to do with load matching.

Best regards, Richard Harrison, KB5WZI

3793. Arrangement of Cliffdweller slinky dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: jason_hsu@my-deja.com
Message-ID: <8r2m8p$8d1$1@nnrp1.deja.com>
Source record: 179019

This is the antenna I am using:
http://www.usa2way.homestead.com/CliffDweller.html

Which indoor setup would provide better performance?
1. Mounting the entire length of the antenna along the side of the room containing the windows. This keeps the entire antenna near the outside of the apartment but limits its length.
2. Mounting half the antenna along the side of the room containing the windows and mounting the other half on the adjacent perpendicular wall. This gives me a longer antenna, but half of the antenna does NOT face the outside.

In addition, ideas on how to disguise this antenna (artwork?) if I use it as a temporary outdoor installation are welcome. Please note that I live in a ground floor apartment with no trees or bushes for concealing things. Now I wish Martha Stewart were a ham.

--
Jason Hsu, KB9PNZ
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com http://www.deja.com/
Before you buy.

3794. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000929135554.15332.00000754@ng-fc1.aol.com>
Source record: 179020

> Does the fact that ARRL still makes the articles available change your mind about the conspiracy theory, Dick?<

It's not called a conspiracy, it's called editorial blacklisting. Past QST articles can't be "archived out" and made to vanish--that's an invalid argument.
A book may, on the other hand, be pulled from publication at any time for more than one reason. If it doesn't sell, it may not be worth reprinting and dropped. Or, if a senior technical editor opposes it's theoretical approach, it may be dropped and replaced with something more to his liking. Many in the industry believe Reflections was taken off the publication list because of the latter -- "reflecting" one of the risks ham radio faces when one publisher enjoys a near-monopoly in the dissemination of technical information.

I, for one, would like to purchase a new a copy of "Reflections" because I loaned mine to someone a while ago and never got it back! People "own" books precisely so they don't have to dig through a mountain of articles to get the information.

Rick K1BQT

3795. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <qJ4B5.7286$qi7.696524@nnrp4.clara.net>
Source record: 179021

CAM suggested:
>On a bang-for-bucks ratio, the SGC system is one of the worst choices
you can make. Take a look at my web page for results of actual 75m
mobile antenna measurements

Hmmm, I see what you mean. Not too encouraging is it.

3796. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: tom_bruhns@agilent.com
Message-ID: <8r2nit$9l1$1@nnrp1.deja.com>
Source record: 179022

There's conduit, and there's conduit... If you used PVC conduit, it would be like a wet noodle unless you added LOTS of guys. If you use EMT conduit (the thinwall stuff meant to be bent) it likely would fold with not much more than the antenna tensioning. But it might work to put in rigid conduit, which is extremely similar to steel water pipe, but guaranteed to have a smooth enough interior to not abrade the wires installed in it. On the other hand, you may find that galvanized water pipe is cheaper. I'd recommend getting a full 21 foot length of perhaps 1-1/2" schedule 40 (and maybe even schedule 80) for the lower section, as a minimum...if you have a way of carrying 21 foot pieces. Disclaimer: no matter how you do the job, it's YOUR responsibility to insure that the installation is safe electrically and structrually.

Cheers,
Tom

In article <A1yA5.92270$i5.3326085@news1.rdc2.on.home.com>,
"Wayne Jones" <wrjones1@home.com> wrote:
> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
> be against my house and the other will be close to and guyed from the corner
> of my back fence.
> I am planning on using 3 10foot sections of electrical conduit, each section
> smaller than the next so the sections will telescope and can be clamped with
> about a foot of overlap. I think the sizes I saw at Home Depot were 1 1/4,
> 1, and 3/4 inches diam
>
> Does anyone know if the conduit is strong enough and how much guying is
> needed for a 30 foot mast?
> Also how would I secure the base of the mast taking into consideration that
> there will be frost down to 4 feet below ground in winter.
>
> I also saw post where someone suggested stripping electrical house wire to
> use for the antenna wire. I assume he meant stripping the outer casing
> containing the coated wires and not the insulation on the individual

wires.
> Do you think this wire is strong enough to hang 30ft without
stretching or
> breaking? Does anyone have any info or opinions on this?
>
> tnx
> Wayne Jones
> ve3gqx
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com http://www.deja.com/
Before you buy.

3797. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <17513-39D4D7AE-61@storefull-118.iap.bryant.webtv.net>
Source record: 179023

Cecil, W6RCA wrote:
"If radiation were dissipative, we wouldn`t even have to bother with this newsgroup. :-)"

"Dissipation" is often a bad word implying something we don`t want.

Dissipation can be a synonym for dispersion. A wire can radiate both radio and heat. Thus it is dissipative in some sense for both.

Best regards, Richard Harrison, KB5WZI

3798. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <39D4DC91.1A58C55@3n.net>
Source record: 179024

Reid Simmons wrote:
>
> Think "STEALTH"... (and)... "Just Do It".
>
Sage advise!

> > > Firestone wrote:
> > > >
> > > > I live in a townhouse with the usual cc&r crap, ...

Do you have access to your attic? In a similar situation, I drilled a
1/2" hole thru the roof above the attic access hatch, allowing me to
raise and lower a 20-foot vertical. Wasn't the best antenna in the world
but worked well with a tuner. Our CC&Rs forbid "attaching" any antenna
to the property. This one wasn't "attached".
Good QSOs
KA3DWW

3799. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a11cd40.609797382@news.seanet.com>
Source record: 179025

On Fri, 29 Sep 2000 08:47:32 -0700, Bart Rowlett
<bart@wb6hqk.ampr.org> wrote:

>Tom W8JI wrote:
>
>> Generators and alternators are normally operated at or close to a
>> conjugate match. Everything is done to keep them that way, and we are
>> in big trouble if they are not!
>
>I disagree.
>
>> Generators and alternators automatically have their source impedance
>> adjusted to match the load impedance through the feedback loop caused
>> by the load sensing system that controls the field winding.
>
>The output impedance of a generator, defined as the rate of change of
>output voltage with respect to a change in output current, is determined
>entirely by the output voltage regulator feedback loop characteristics.
>In most simple systems like automotive alternator/regulator systems and
>small power plants, the loop gain, and therefore output impedance, is
>essentially constant over most of the operating range. A slightly better
>approximation is that the loop gain decreases, and therefore output
>impedance increases, as the output current rises and the field begins to
>saturate.
>
>Usually where there is only a single generator involved and the
>transmission network is small, the voltage regulation loop gain is set
>as high as possible while insuring unconditional stability for all
>likely load characteristics and throttle settings. The result is the
>lowest possible output impedance (greatest stiffness) consistent with
>overall stability. This condition has nothing to do with a conjugate
>match.
>
>In some systems such as small construction power plants powered by an
>integral internal combustion engine, the voltage regulation is sometimes
>compromised to reduce the likelihood a temporary overload (surge) will
>stall the prime mover.
>
>More complex systems involving multiple generators interconnected
>through a transmission and distribution system having significant
>impedance (inductance) require a more sophisticated approach towards
>insuring system stability. In some cases, the voltage regulation loop of
>(some) of the individual generators is, for practical purposes, opened,
>and either power or current becomes the regulated variable.

>
>> The power house is a good example of how maximum efficiency occurs
>> when an energy source and load are matched to each other.
>
>Ideally, large scale power generation systems are designed for the
>lowest possible operating cost over the life of the system. Sometimes
>cost minimization is not optimal due to shortages of capitol or economic
>uncertainties having to do with the long term value of money. For
>various reasons, most of them obvious, a cost optimized power plant will
>consist of a generator and prime mover which peak in efficiency when
>operating at a power level somewhere between average and peak output
>power. As far as I know, this outcome has nothing to do with conjugate
>matching of the power plant to the load.
>
>bart
>wb6hqk

Hi Bart,

You and Tom are arguing the same side of the case, but you have a feedback loop that does not include the load, simply the output.

As you state, the feedback loop is the principal mechanism for stabilizing an amplifier's characteristics. This was established at Bell Labs in 1938 by a series of lectures from Hendrich Wade Bode. His lectures became central to all system's design that followed, such that we find the Bode plot a commonplace engineering representation for an amplifier.

Negative feedback (or error, or noise gain in Bode's work) is directly causal AND correlatable to output resistance, input resistance, distortion, Power supply rejection, and other exotic variables. The factor relates very simply. The lesson learned is the more feedback, the better the amplifier's ability to accurately transform the signal's power level.

It is commonplace in amplifier design (and I am speaking of them generally, not the Henry) to enlarge the feedback loop by including the load (as separate and distinct from the input/output connectors). The typical Ham has very limited opportunities to observe such examples, but one that may be found is in the laboratory power supply (mine from Acopian is an example, HP makes them too); even the small open frame linear supplies offer this (but again, not commonly available except at swap meets where military/industrial surplus is found).

These supplies have four output leads. Two supply the current set at a voltage that is close to the user's selected value. The other two leads go to the load (yes so do the current leads) to complete the feedback loop as the "sense" leads. These leads provide the error signal back to the closed loop amplifier responsible for setting the voltage and current conditions. In fact these leads are the principal

part of that loop everyone speaks of.

When ANY Power Supply applies current to the load, there is some voltage droop between the output connector of the supply and the input connector of the Load. The "sense" leads conduct no appreciable amount of current and thus do not suffer the same droop. When that voltage across the Load is passed back to the amplifier, the difference between this voltage and the voltage at the output is translated into a voltage boost at the output such that the Load sees the voltage set by the user (a specific example is below).

This technique was invented by Lord Kelvin and in Metrology there is a class of connector that looks like alligator clips (a pair of them) that is actually this same four lead configuration. These are call Kelvin clips and they are used for high precision power sources and are applied to precision measurements of resistance. By moving the loop outside of the amplifier (power supply as illustrated here), the amplifier can be adjusted to compensate for the load variation - this is what Tom is talking about.

The typical case is a 13.6V common two lead Power Supply supplying 25 Amps through 0.1 Ohm lead resistance which causes a droop of 2.5V presenting the load with 11.1V @ 25A. The four terminal Power Supply would instead source 16.1V @ 25A at the output connector and MAINTAIN 13.6V @ 25A at the Load connector. If the Load were to drop such that only 2.5A were required at 13.6V, then the four lead Power Supply would sense the change in the droop and lower the voltage boost such that the load would still be MAINTAINed at 13.6V @ 2.5A with the supply now sourcing 13.85V @ 2.5A. The two lead power supply will source the same 13.6V @ 2.5A, and the Load only suffers slightly with 13.35V @ 2.5A.

It will be noted that the two types of Power Supply above display considerably different efficiencies or states of match - depending on where the lead loss is included. The two lead Power Supply example is artificial in that variation in current demand will cause some variation in voltage at the output that I've neglected to treat for simplicity's sake.

With the loop extended outside of the amplifier (power supply in this example), this loop thus embraces additional loss within it and draws it into the Source Z. This one fact alone is the principal source of considerable confusion when the topic of Source Z arises in this group. This is why Metrologists speak of planes of the load, planes of the source, planes of measurement and so on.

This also illustrates the failure of metaphors. The topic diverged into issues of the power grid, and the power grid does balance and achieve conjugation, but in a way that is alien to the RF Amplifier topic. My example of 4 lead power supplies is equal in alien content, but it brings accessibility to the discussion.

For all intents and purposes there are two feedback loops in the common RF Amplifier (both barefoot and for the Henry). The first one is found in the coupling capacitor feeding the output back to the input (not to be confused with the equalization circuit). This controls/reduces distortion and stabilizes input/output Z. The second is found in the SWR circuitry that as fed back to the exciter, which in turn controls (through a PIN diode acting as a voltage variable potentiometer) the amount of Power that can be sourced (and is typically called "fold-back"). All may note that BOTH loops are internal, and they should all note that even so, these loops by definition encompass all losses to combine the circuitry into a monolithic Source. Thevenin would understand.

73's
Richard Clark, KB7QHC

3800. Re: WTB KLM 435-18C or equiv.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: bobby <news@bobby.net>
Message-ID: <8r2p8c$2ure$1@newssvr05-en0.news.prodigy.com>
Source record: 179026

Antenna found thanks for reading.

bobby wrote in message <8qr328$78ts$1@newssvr05-en0.news.prodigy.com>...
>
>Does anyone have a KLM 435-18C or similar Circular Polarized
>UHF satellite antenna hanging around the shack still waiting to be
>put up or sold ?
>Perhaps you've put it up and aren't using it any more
>I'm interested in buying it and playing with it for a while.
>tnx 73 Bobby K4BGA
>
>

3801. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gunner Dave <gunnerd@earthlink.net>
Message-ID: <39D4EE00.FFBE3159@earthlink.net>
Source record: 179027

But He Is SO funny!

Bill Aycock wrote:
>
> The reader should be aware that the individual responsible for the
> screen name "Fractenna" is a known troll and has been banned from
> several mailing lists dedicated to Ham Radio. His "discussions"
> inevitably lead to strife.
>
> ANY response to him is likely to lead to a disagreeable interaction. If
> you doubt this, please view the archives for this News Group, with
> particular attention to the screen name "Fractenna".
>
> He is an ego-driven person who does not react well to ANY disagreement
> or difference with his position. He has been known to misquote,
> misinterpret and distort messages from others that put him in a poor
> light. He has done damage to some people, off line, because he saw them
> as a danger to his "reputation".
>
> Be warned
>
> Fractenna wrote:
> >
> > QST--
> >
> > You are invited to join one or all of the following lists on e-groups(formerly
> > onelist). All these reflectors are e-mail based, friendly, objective, and
> > moderated ,so that no spam, porn, off-topic, or personal-offensive posts are
> > sent out. You will receive no off-list e-mails by subscribing: again; no spam.
> > Occasionally free offers of antenna files and other info are presented, along
> > with photos of relevant antennas (unlike most NG's you CAN do attachments).
> >
> > These lists (with average recent subscriber sizes) are:
> >
> > ANTENNAS@EGROUPS.COM 190 members
> > CROSSFIELDANTENNA@EGROUPS.COM 70 members
> > FRACTALANTENNA@EGROUPS.COM 260 members
> >
> >
> > Please review the descriptions at:
> >
> > http://www.egroups.com
> >
> >

> > Please note the CFA list specifically deals with this antenna in an objectively
> > critical fashion and no posts will be allowed that make grandiose claims
> > without supporting data presented. To date, no data has been presented which
> > requires the extraordinary claims made by some pundits: there is no evidence
> > for better performance than any other small vertical antenna (and that
> > performance is poor).
> >
> >
> > Fractal antenna posts should go the the fractal antenna reflector; not the
> > antennas reflector.
> >
> > To subscribe to any list, either go through the process at egroups, or to skip
> > the process (and some say 'annoying questions') just do:
> >
> >
> >
> > ----------------- -subscribe@egroups.com
> >
> > where the ------------ is the name of a given list (such as 'fractalantenna')
> >
> >
> > If you have a specific question on this post, please e-mail me off-NG at
> > chipn1ir@aol.com.
> >
> > 73,
> > Chip N1IR

3802. Yagi or Log Periodic? Beginner question!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: alex <A_L_E_X1@yahoo.com>
Message-ID: <970257511.166626@nomad.vif.com>
Source record: 179028

Hi everyone!

I want to make my own antenna (i surely can buy one in radio shack but i want to make something with my hands). That antenna have to capture the following freqs:

Channel Freq
02 55.25 --> important
06 83.25 --> important
10 193.25 --> important
12 205.25 --> important
17 489.25
29 561.25
33 585.25
35 597.25 --> important
44 651.25 --> important
46 663.25 --> important
57 729.25
62 759.25

What kind of antenna i have to use? (i think that i have to use Yagi AND Log Periodic, am i right)?
Some URLs with designs?
Maybe someone have constructed something similar?
Please HELP

TheImperia
theimperia@yahoo.com

3803. Question: YAGI vs Log Periodic. What's better?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: alex <A_L_E_X1@yahoo.com>
Message-ID: <970257702.87827@nomad.vif.com>
Source record: 179029

Hi everyone!

I want to make my own antenna (i surely can buy one in radio shack but i want to make something with my hands). That antenna have to capture the following freqs:

Channel Freq
02 55.25 --> important
06 83.25 --> important
10 193.25 --> important
12 205.25 --> important
17 489.25
29 561.25
33 585.25
35 597.25 --> important
44 651.25 --> important
46 663.25 --> important
57 729.25
62 759.25

What kind of antenna i have to use? (i think that i have to use Yagi AND Log Periodic, am i right)?
Some URLs with designs?
Maybe someone have constructed something similar?
Please HELP

TheImperia
theimperia@yahoo.com

3804. Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Wayne Jones <wrjones1@home.com>
Message-ID: <7Y6B5.95490$i5.3436338@news1.rdc2.on.home.com>
Source record: 179030

Well, thanks to this newsgroup, I have been able to settle on the best antenna for my 20m cw qrp operation.

I plan to put up a 30 foot mast made of fence top rail. The mast will extend about 14 feet above the edge of my 2 story house.
With the antenna attached to the ends of the roof I get an inverted V with legs of 21 feet and an angle of 90 degrees.
With the active part of the leg at about 16 feet on each side, the remaining wire will elevate the antenna about 3 feet above the rain gutter that runs along the edge of the roof under the antenna and should keep the ends out of the snow in winter. I will use a plastic plumbing pipe T to insulate the top of the metal mast from the antenna wire.

I understand that with an inverted v, the legs have to be slightly longer than a horizontal dipole. Is it possible to come up with a good guess as to what the length should be?

Also, will the impedance be around 50 ohms at the center? I understand that the impedance varies with the angle of the V.

Tnx
Wayne Jones
ve3gqx

3805. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <st9vnar2k9sc20@corp.supernews.com>
Source record: 179031

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39d48311.9207373@news.akorn.net...

>
> Hi Cecil,
>
> Generators and alternators are normally operated at or close to a
> conjugate match. Everything is done to keep them that way, and we are
> in big trouble if they are not!
>

I think we'd be in big trouble if generators *were* matched to their load.
Maximum power transfer is not desired. Supplying the connected demand, no
more and no less, with maximum efficiency is the aim.

The generator's impedance (especially the real part) is made as low as
possible. To raise it to equal the load resistance would be destructive.

73--Nick, WA5BDU

3806. Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D4FE3A.7C286826@hiwaay.net>
Source record: 179032

I know I can paw around in the Archives and find it, but asking may be quicker. JUst what was the Grant Chip and Co. got, and what was the issuing agency? My Congresman needs to know.

Bill-W4BSG

3807. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8r30t3icq1@nnrp1.deja.com>
Source record: 179033

In article <39D4A748.E290D543@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> VE9SRB wrote:
> > 100 watts + 100 watts does not "add" to become 200 watts.
>
> Since power is a scalar, of course it does. Power is a scalar
> measured at a point past which energy flows.
>
> Nope, you forgot current. If the voltages are in phase, the currents
will
> be out of phase, keeping the 100+100=200 math consistentent. At a
Z0-match,
> the ratio of V/I must change because the Z0 of the transmission line
> changes. Thus, when transistioning from Z0=50 to Z0=300, the voltage
will
> indeed increase but an exactly corresponding decrease in current will
occur
> which keeps energy conserved. Remember, reflected power has the
voltage and
> current 180 degrees OUT of phase. If the voltages add, the currents
will
> subtract (and vice versa).

Hi there Cecil,
There are 2 voltage waves and 2 current waves at the point of interest.
Let's say that the phases are all identical to keep things simple. If
the voltage waves combine and the current waves combine, does
(E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?
73, Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

3808. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39D502C5.B80AB0B2@bellatlantic.net>
Source record: 179034

Yes I did. Scroll down in my post (which you included below) to the
paragraph the begins with "Bottom line ..."

sideband@mindspring.com wrote:

> Did you guys see my post last sunday where I said I found the problem and got it down to
> 1.4:1 ? Just wondering. :-)
>
> ehsjr@bellatlantic.net wrote:
>
> > "George, W5YR" wrote:
> >
> > > I do not mean this personally so put the blow torch away! <:}
> >
> > LOL! Who the hell am I to flame anybody for something
> > technical about antennas! Besides, try as I might, I can't find
> > anything in your post to flame.
> >
> > > I am much more inclined to believe the prediction that EZNEC makes than
> > > to accept what your analyzer reads under the experimental conditions you
> > > described.
> >
> > Me too. That's why I am so puzzled. I've NEVER had a dipole whose
> > minimum swr after pruning was 1:8 to 1. That's why I asked others to
> > experiment and post their results. And why I asked Ed to check it out,
> > to ensure that there wasn't a "finger check" when he ran the program.
> >
> > A possible answer came in E-mail. It said: "Note that minimum SWR
> > is not always consistent with resonance." And Ed's post talked about
> > 1:8 to 1 at resonance - it didn't say minimum swr.
> >
> > Ok that said, I went further. I attempted to build a stiff wire antenna
> > to avoid the effects of end loops/insulators. This was a half-assed
> > antenna. I made it out of #6 bare copper wire. I had to use a 26"
> > piece of 1/2 plywood in the center - I mounted the elements to that.
> > It worked temporarily, but the elements would slowly sag. Anyway,
> > I screwed the wood to the top of an 8' 2x4 and the swr was flat (could
> > just barely see the needle move on the swr meter) at the design frequency.
> > But when I moved the thing close to the house, the swr went up to about
> > 1:7 to 1. Unfortunately, I couldn't move the thing around as I hoped without
> > causing the elements to sag before the motion was complete, so I can't
> > say that changes were solely due to proximity to the house. Sigh. I guess
> > I'm going to have to get fiberglass poles to simulate sideband's antenna.
> >
> > I then disassembled a 3 element 6 meter yagi that I've been experimenting

> > with. (Trying to learn stuff you guys already know.) I kept the driven element
> > on the boom. Swr was flat after adjusting the gamma. This is a monopole,
> > so it doesn't count - but I still get a flat swr. I put together a shortened
> > copper pipe (1/2 inch) dipole fed thru a 5 turn coil wrapped on a broom handle
> > and I can adjust that flat, too, by compressing/expanding the coils.
> >
> > Bottom line - I can get the swr below 1:2 to 1 on all of these antennas.
> > Sideband's dipole gets a minimum of 1:8 to 1 and goes up on either
> > side of that (or it did, before he moved the coax). So I still maintain
> > that there is (or at least was) something wrong when the minimum
> > swr was 1:8 to 1, and I challenge Ed's assertion that the antenna
> > is working perfectly. Maybe it should be 1:8 to 1 at resonance -
> > but I can't see it being 1:8 to 1 minimum in the absence of effects
> > other than being 8' above ground. I believed then, and still believe
> > that it is the effects of being near the structure that are causing
> > the minimum Swr to be 1:8 to 1 (originally) and 1:4 to 1 (now).
> > I believe that the antenna should be able to be adjusted so that
> > the minimum swr will be below 1:2 to 1 if it is installed 8' above the
> > ground in the clear.
> >
> > Does EZNEC insist that a 50 mhz dipole (8' above ground but
> > otherwise clear of influence of nearby objects) at *minimum* swr
> > will be close to 1:8 to 1 ? If so, it is wrong.
> >
> > Another question: I've always thought that a dipole exhibited minimum
> > swr close to resonance - again, assuming it is in the clear of objects
> > other than ground.
> >
> > > Your results simply do not agree with the theoretical basis
> > > on which that antenna is working. There are just too many things that
> > > can take place in any experiment, no matter how well contrived and
> > > executed, that can produce results that differ from "theory."
> > >
> > > In itself, those results do not disprove "theory" rather they raise
> > > doubt as to be validity of the experimental conditions.
> > >
> > > I know that you are trying here and doing a yeomanlike job at it, but
> > > don't be too quick to write off decades of work in this area on the
> > > basis of a ten-minute experiment. And, as gently as I can put it, I
> > > would not rely completely on the accuracy of that analyzer.
> > >
> > > Please keep us posted on your work - this is interesting stuff!
> > >
> > > --
> > > 72/73, George W5YR - the Yellow Rose of Texas
> > > Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> > > Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> > > Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
> > >
> > > ehsjr@bellatlantic.net wrote:

> > > >
> > > > W1RFI wrote:
> > > >
> > > > > >From: sideband@mindspring.com
> > > > >
> > > > > > I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> > > > > > have the use of a MFJ 259 analyzer. I am only able to put
> > > > > >this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> > > > > >complex and currently have it hidden under the wooden balcony
> > > > > >of the apartment above me. The SWR is currently about 1.8 at 50 MHz.
> > > > >
> > > > > This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above
> > > > > ground. The antenna, when resonant, would have a feed-point impedance of 90
> > > > > ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.
> > > >
> > > > Ed, I've got a real problem with that. By real problem, I mean:
> > > > I went out and threw together a 6 meter dipole out of zip cord,
> > > > hung it at 8' (actually, 102 inches and also re hung at 95 inches)
> > > > and got a flat SWR on the MFJ 259. The analyzer needle barely
> > > > moved. I then remade the dipole - no loops at the end, and wire-tied
> > > > it to a nylon messenger rope. At 92 inches height I got 1.4 to 1. I
> > > > assume the difference is due to the wire ties and the fact that the
> > > > antenna was in contact with the support rope for its full length.With
> > > > no end loops it had minimum swr at about 52.3 mhz. With end loops
> > > > (to tie the support ropes to it) the minimum SWR was at about 56.1
> > > > I would have used egg insulators instead of loops if I had some on
> > > > hand. The feedpoint is an S0-239 with about 20' of RG 58. I added
> > > > a 4' coax extender cable and re-measured each time - no change in
> > > > the swr. The antenna was installed over wet soil, and the nylon rope
> > > > was slightly damp from laying on the grass for about 5 minutes.
> > > >
> > > > Ok, that said, the reason I did this is that I've never built a dipole
> > > > with a 1:8 to 1 SWR after pruning. I find the cited EZNEC figure
> > > > hard to believe - so hard that I had to check it. I still intend to do
> > > > more checking, but bottom line, I find the EZNEC number
> > > > highly suspect. Could you please re-check it? I don't have
> > > > EZNEC so I can't. I would also ask others to spend a few minutes
> > > > building the antenna and posting the SWR minimums they find.
> > > > You only need to split 5 feet of zip cord (or use 10 feet of single
> > > > conductor) and an S0-239 (or just solder the coax to the elements)
> > > > and can slap the thing together real quick. I'm going to re-do
> > > > my experiment, using egg insulators. If there was no "finger check"
> > > > when you ran it and EZNEC gives 1:8 to 1 then real world measurements
> > > > have to come in very close or need an explanation as to why they
> > > > are so far off. According to my analyzer, the antenna was 50 ohms
> > > > at resonance. The analyzer checks out into a dummy load, and
> > > > measurements with my bird and 2 swr meters (Daiwa cross needle
> > > > and Welz) on my antennas have compared the same as with the analyzer
> > > > in the past (I did not check today) so I don't think there is anything wrong
> > > > with it. I really suspect that EZNEC figure.

>
> --
> The preceding may or may not have been authored by myself but I offer it to you for your
> perusal.
> Feel free to read as little or as much of it as you like. Be forewarned that I refuse to
> use a
> spell checker and don't take criticism well.

3809. Re: Penalty

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <otu2r8.7df.ln@mail.specsol.com>
Source record: 179035

william ewald <wgewald@att.net> wrote:
> On Fri, 29 Sep 2000 01:53:04 GMT, Gilbert Mouget
> <gilbert.mouget@waika9.com> wrote:
>>:
>>:If you are aware of any infringers as described above, please notify me ,and
>>:Fractal Antenna Systems, Inc. will notify the infringer and request that they
>>:remove said file from publication and distribution, under penalty of suit.
>>
>>ARE YOU AFRAID OF THE TRUTH DOCTOR FREACKTENNA ?

> I'd just like to know what "under penalty of suit" means, if anything.

I think it means you will have to wear a suit and tie 24 hours a day.

I also think the author of that sentence should be in a white suit with
wrap around sleeves.

Jim Pennino

3810. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j7v2r8.7df.ln@mail.specsol.com>
Source record: 179036

Wayne Jones <wrjones1@home.com> wrote:
> Well, thanks to this newsgroup, I have been able to settle on the best
> antenna for my 20m cw qrp operation.

> I plan to put up a 30 foot mast made of fence top rail. The mast will extend
> about 14 feet above the edge of my 2 story house.
> With the antenna attached to the ends of the roof I get an inverted V with
> legs of 21 feet and an angle of 90 degrees.
> With the active part of the leg at about 16 feet on each side, the remaining
> wire will elevate the antenna about 3 feet above the rain gutter that runs
> along the edge of the roof under the antenna and should keep the ends out of
> the snow in winter. I will use a plastic plumbing pipe T to insulate the top
> of the metal mast from the antenna wire.

> I understand that with an inverted v, the legs have to be slightly longer
> than a horizontal dipole. Is it possible to come up with a good guess as to
> what the length should be?

> Also, will the impedance be around 50 ohms at the center? I understand that
> the impedance varies with the angle of the V.

> Tnx
> Wayne Jones
> ve3gqx

As I recall, the resonant frequency goes down and the impedance goes down
as you swing the legs away from horizontal. Mine wound up at 48 Ohms.

Why don't you download the demo copy of eznec and play with it? The demo
version will do a dipole.

Jim Pennino

3811. Re: Penalty

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000929172749.07491.00000183@ng-fl1.aol.com>
Source record: 179037

>I'd just like to know what "under penalty of suit" means, if anything.<

Does it means a PhD wearing a bad suit is going to troll you?

Rick K1BQT

3812. Re: VHF/UHF Ham/Business Band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000929173424.07491.00000186@ng-fl1.aol.com>
Source record: 179038

A 1/4 wave mobile whip (or fixed ground plane) cut for--say 150 or 151 MHz will cover both the 2 meter and business bands with less than 2:1 VSWR. Once you get into 5/8 wave or half-waves in phase, forget it. They are too narrow.

Rick K1BQT

3813. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <3a130a9c.625505479@news.seanet.com>
Source record: 179039

On Fri, 29 Sep 2000 21:17:33 GMT, klocko@toad.net wrote:

>In article <39D4A748.E290D543@bigfoot.com>,
> CAM <cam2338@bigfoot.com> wrote:
>> VE9SRB wrote:
>> > 100 watts + 100 watts does not "add" to become 200 watts.
>>
>> Since power is a scalar, of course it does. Power is a scalar
>> measured at a point past which energy flows.
>>
>> Nope, you forgot current. If the voltages are in phase, the currents
>will
>> be out of phase, keeping the 100+100=200 math consistentent. At a
>Z0-match,
>> the ratio of V/I must change because the Z0 of the transmission line
>> changes. Thus, when transistioning from Z0=50 to Z0=300, the voltage
>will
>> indeed increase but an exactly corresponding decrease in current will
>occur
>> which keeps energy conserved. Remember, reflected power has the
>voltage and
>> current 180 degrees OUT of phase. If the voltages add, the currents
>will
>> subtract (and vice versa).
>
>Hi there Cecil,
>There are 2 voltage waves and 2 current waves at the point of interest.
>Let's say that the phases are all identical to keep things simple. If
>the voltage waves combine and the current waves combine, does
>(E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?
>73, Bill N3WK
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

Hi Bill,

Forgotten binomial high school math? The FOIL method?
>(E1+E2)*(I1+I2)
if properly stated should resolve to
E1 * I1 + E1 * I2 + E2 * I1 + E2 * I2

FOIL:
First two

Outer two
Inner two
Last two

73's
Richard Clark, KB7QHC

3814. Re: Newsgroup jammers

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <sta3i4109n6595@corp.supernews.com>
Source record: 179040

Why is it, that the first solution proposed, every time, is to ADD to the news group clutter, by making more replys to the freak ? Simply filter him out, and them ignore him from then on !

"Jim Pennino" <jimp@mail.specsol.com> wrote in message news:i45pq8.5sg.ln@mail.specsol.com...
>
> While this is an open newsgroup and all are free to post, certain
> individual(s) have persisted in postings that have no content other than
> to create flames, i.e. a newsgroup jammer if you will.
>
> Given the delays in newgroup propogation, I propose the following:
>
> When the "jammer" makes a post, respond with something similar to the
> following:
>
>
> This poster has, in my personal opinion, a track record of abuse and troll
> like posts.
>
> Do not resond to this post. This person, in my personal opinion, is not
worth
> the bandwidth.
>
> For those that have doubts, go to www.dejanews.com and do an advanced
> search with the following parameters:
>
> Forum: rec.radio.amateur.antenna
>
> Author: fractenna
>
> Keywords: "this thread is closed" 53 hits last count
> "lawsuit" 47 hits last count
> "death threat" 11 hits last count
>
>
>
> Once one sees such a follow up, no further post is necessary.
>
> Of course, all of this is purely my personal opinion based on observation
> of certain posters, some of which in my personal opinion are emotionally
> unstable.
>
> Jim Pennino

>
>

3815. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39D50DC4.BCC24425@bellatlantic.net>
Source record: 179041

Thanks for hanging in there and replying, and for posting the graph - great!

Something surely is going on. Both you and Roy have replied, and if I understand
you both correctly, your real world experience has closely matched the EZNEC
modeling. Meanwhile, I've always gotten low swr pruning dipoles. This is going

to drive me crazy. Roy mentioned coax - maybe its the coax I'm using. I used the
same 20' piece of rg58 coax for all the 6M dipoles I built in response to this thread.
(I made each reading with that 20' and also re-measured with an added short coax

jumper) I guess I'll have to make a 1/2 wave piece of coax out of some 8X and re-do
the measurements. I'll also "test" the analyzer against resistors - that may be a valid
test, but says nothing about how well it does in the presence of reactance. Next,
I'll bring the makings of a dipole to a friends house, put it together and prune it for
minimum swr at 8 feet on 6 using the analyzer. Then I'll ask him to measure it with
his return loss bridge and see what he gets.

After that, if I end up close to 1:6 to 1 minimum swr, I'll be satisfied. If not,
I don't know what to do next. Any ideas?

"Ed Hare, W1RFI" wrote:

> <ehsjr@bellatlantic.net> wrote:
>
> in message news:39D3DC7C.CDC5FF9@bellatlantic.net...
>
> > > I am much more inclined to believe the prediction that EZNEC makes than
> > > to accept what your analyzer reads under the experimental conditions you
> > > described.
>
> > Me too. That's why I am so puzzled. I've NEVER had a dipole whose
> > minimum swr after pruning was 1:8 to 1. That's why I asked others to
> > experiment and post their results. And why I asked Ed to check it out,
> > to ensure that there wasn't a "finger check" when he ran the program.
>
> It doesn't look like much of a finger error; I just ran it again here at
> work (NEC-4 engine) and got Z=81.7+j0.1 for a resonant 6 M half-wave dipole

> 8 feet over average ground.
>
> > A possible answer came in E-mail. It said: "Note that minimum SWR
> > is not always consistent with resonance." And Ed's post talked about
> > 1:8 to 1 at resonance - it didn't say minimum swr.
>
> The SWR did not change much when I went above or below 50.2 MHz, the
> frequency for which I designed the antenna. It remained near 1.6:1, in this
> case.
>
> > Bottom line - I can get the swr below 1:2 to 1 on all of these antennas.
> > Sideband's dipole gets a minimum of 1:8 to 1 and goes up on either
> > side of that (or it did, before he moved the coax). So I still maintain
> > that there is (or at least was) something wrong when the minimum
> > swr was 1:8 to 1, and I challenge Ed's assertion that the antenna
> > is working perfectly.
>
> Something is sure going on. :-) The following graph shows how the
> *resistive* component of the EZNEC model varied with height above ground.
> See:
>
> http://www.arrl.org/~ehare/temp/6mdip.jpg
>
> > Does EZNEC insist that a 50 mhz dipole (8' above ground but
> > otherwise clear of influence of nearby objects) at *minimum* swr
> > will be close to 1:8 to 1 ? If so, it is wrong.
>
> In running it here over average ground, it says 1.6:1 is what you should get
> at 8 feet. I don't recall my ground parameters when I ran it at home.
>
> > Another question: I've always thought that a dipole exhibited minimum
> > swr close to resonance - again, assuming it is in the clear of objects
> > other than ground.
>
> That is my modeling and real-world experience.
>
> 73,
> Ed Hare, W1RFI

3816. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <sta3jom4vdkdb1@corp.supernews.com>
Source record: 179042

Have you ever considered learning how to use your filters ?

"Larry Benko" <benko@aztek-eng.com> wrote in message
news:39CFFF7E.7BFEFB55@aztek-eng.com...
> One persistent JERK has caused several people to leave the
> group in disgust. This behavior continues and the JERK does
> not appear to have a conscience or any self decency. This
> really upsets me as I enjoy learning from several of the
> experts provided that I can weed through the nonsense.
>
> Has the group ever considered going to a moderated group with a
> reasonable posting policy? I know that many folks don't like
> the idea of a moderated group but virtually everyone dislikes
> the constant behavior of this one person who can't possibly
> have so much free time and a job. This would fix most of the
> problems and instantly reduce the number of posts by 1/6th
> without loss of any content. Remember that this one bad apple
> is responsible for 1/6th of the posts. I don't know who would
> want the unenviable job of moderator. Am I way off base here
> or do some folks actually enjoy this infantile behavior?
>
> Larry, W0QE

3817. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <b14atsgla0du7mjjpa0s6p4i5lkflfr821@4ax.com>
Source record: 179043

On Fri, 29 Sep 2000 10:27:39 -0700, Reid Simmons <reid.w.simmons@intel.com> wrote:
>Gee, no SW receivers or transmitters huh? How did people justify their AM/FM
>radios, TVs, cordless phones, cell phones, wireless alarms, etc.?

Perhaps because none of those things operate between 3 and 30 MHz.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3818. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D5126C.9A5CF19@eznec.com>
Source record: 179044

Jim Pennino wrote:
>
> Wayne Jones <wrjones1@home.com> wrote:
> > Well, thanks to this newsgroup, I have been able to settle on the best
> > antenna for my 20m cw qrp operation.
>
> > I plan to put up a 30 foot mast made of fence top rail. The mast will extend
> > about 14 feet above the edge of my 2 story house.
> > With the antenna attached to the ends of the roof I get an inverted V with
> > legs of 21 feet and an angle of 90 degrees.
> > With the active part of the leg at about 16 feet on each side, the remaining
> > wire will elevate the antenna about 3 feet above the rain gutter that runs
> > along the edge of the roof under the antenna and should keep the ends out of
> > the snow in winter. I will use a plastic plumbing pipe T to insulate the top
> > of the metal mast from the antenna wire.
>
> > I understand that with an inverted v, the legs have to be slightly longer
> > than a horizontal dipole. Is it possible to come up with a good guess as to
> > what the length should be?
>
> > Also, will the impedance be around 50 ohms at the center? I understand that
> > the impedance varies with the angle of the V.
>
> > Tnx
> > Wayne Jones
> > ve3gqx
>
> As I recall, the resonant frequency goes down and the impedance goes down
> as you swing the legs away from horizontal. Mine wound up at 48 Ohms.
>
> Why don't you download the demo copy of eznec and play with it? The demo
> version will do a dipole.
>
> Jim Pennino

The demo version of EZNEC 3.0 is free and available from
http://eznec.com. The "Test Drive" tutorial exercise takes you through
the design of first a dipole, then an inverted vee. So by the time
you're finished with it, you'll have a model that you can use to answer
your questions. To get to the Test Drive in EZNEC 3.0 (either the demo
or full version), click the Help menu, then select Contents, then Test
Drive.

Roy Lewallen, W7EL

3819. FS: Portable 2 Mtr J-Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: w1ksz@tiac.net
Message-ID: <39d5112a.1694879@news.tiac.net>
Source record: 179045

I have a 2 Mtr J-Pole antenna that would be great for portable
operation. It's about 8 feet of RG-58 to what looks like a balun
to a J-Pole made from high quality twinlead. Has nylon loop at
the top to hang it up.
$20, shipped USPS Priority Mail, CONUS.

73, Dick, W1KSZ

3820. NEED: fiberglass antenna sections (military)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: steve4621@aol.com
Message-ID: <20000929180757.14029.00000213@ng-cn1.aol.com>
Source record: 179046

I need the fiberglass antenna sections for the military fiberglass verticles. part# AT1042/U---nsn 5985-00-733-6045. These are one of the only fiberglass military types there are. Please email.

Steve

3821. Re: conduit mast

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Mary Anne Olsen <wolsen@erols.com>
Message-ID: <39D513E7.DA5FB9B6@erols.com>
Source record: 179047

I put up a masts (flag poles) using 2 inch EMT. Each flag pole has 5 sections; 2 for the base and 3 for the mast for a total of 30 feet. Criteria was that it was to be temporary until a Butternut was installed and I didn't care if it came crashing down as long as no harm would be done. No guys were used and this was done two years ago. The dipole had a total length of 104 feet using the standard 7 strands of copper wire. I have sandy soil and used a shop vac to dig a five foot holes. Freeze line is probably a foot at most. Top of one mast is about 6 feet off vertical and the other about 3 feet. This bowing is due to not aligning the sections together properly. Had a little iced storm last winter and the wire stretched an extra 10 feet but it's still standing. It requires two persons to raise or lower. Bill N3TVU

Wayne Jones wrote:

> I want to put up a budget 30 foot 20m dipole suspended by 2 masts. One will
> be against my house and the other will be close to and guyed from the corner
> of my back fence.
> I am planning on using 3 10foot sections of electrical conduit, each section
> smaller than the next so the sections will telescope and can be clamped with
> about a foot of overlap. I think the sizes I saw at Home Depot were 1 1/4,
> 1, and 3/4 inches diam
>
> Does anyone know if the conduit is strong enough and how much guying is
> needed for a 30 foot mast?
> Also how would I secure the base of the mast taking into consideration that
> there will be frost down to 4 feet below ground in winter.
>
> I also saw post where someone suggested stripping electrical house wire to
> use for the antenna wire. I assume he meant stripping the outer casing
> containing the coated wires and not the insulation on the individual wires.
> Do you think this wire is strong enough to hang 30ft without stretching or
> breaking? Does anyone have any info or opinions on this?
>
> tnx
> Wayne Jones
> ve3gqx

3822. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <QE8B5.1839$ai4.349544@news.ntplx.net>
Source record: 179048

<ehsjr@bellatlantic.net> wrote:

> After that, if I end up close to 1:6 to 1 minimum swr, I'll be satisfied. If
> not, I don't know what to do next. Any ideas?

What I would personally find very interesting is a plot of the resistive part of the reactance vs height above ground. I would like to compare the way it varies against the graph I posted at http://www.arrl.org/~ehare/temp/6mdip.jpg . That graph assumes that the physical surface of the earth is the ground that is modeled. I have often wondered just how far below the surface the "real" ground is. :-) A simple measurement, but I lack the necessary test resources -- the round tuit. :-) If you get some results of R vs height, I can add them to the graph and then we can REALLY have something to talk about. :-)

IMHO, the measurement of the height above ground at which the resistance is the highest would be a very good way to estimate the actual depth of the ground.

As an aside to the data, what is the present state of your earth? Wet? Dry? Do you have an estimate of the characteristics of your soil? Unfortunately, I didn't see a tremendous difference in R vs ground characteristics. With "very good" ground, the R at 6.2 feet above ground was 90.23 ohms. With very poor ground, it was 82.29 ohms. Although I would like to think that one could first determine the height of maximum R (in this case, with VG ground, it was 6.2 feet) and then use the actual R value to obtain an estimate of ground characteristics, I fear that 82 vs 90 ohms is not a tremendous swing and that the actual R value would vary a bit from what EZNEC predicts due to other local variables. But if someone IS over "very poor" ground (ie, dry desert?), and could do the measurement, then improve the ground with moisture and salts, then do another measurement, it sure would be interesting to see how close it comes to what EZNEC predicts. The thing to watch out for, especially when the ground is improved, is if the effective height of the antenna above ground varies as the "ground" moves from the surface to lower depths.

Roy or others, have you heard of or done any work on the actual depth of ground relative to the surface of the earth? I am just musing here, hoping to ferret out some explanation for the differences between modeling and ehsjr's measurements.

73,
Ed Hare, W1RFI

3823. Re: Penalty

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <GH8B5.1840$ai4.349533@news.ntplx.net>
Source record: 179049

Jim Pennino <jimp@mail.specsol.com> wrote:

> I think it means you will have to wear a suit and tie 24 hours a day.

Hey, the only time I wear a suit is to banquets and when I build the
4-element Yagi antenna out of copper pipe at hamfests! The tie is needed to
wipe the paste flux off the antenna before I pass it around. :-)

73,
Ed Hare, W1RFI

3824. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D51DF3.7FA77EB0@eznec.com>
Source record: 179050

"Ed Hare, W1RFI" wrote:
> . . .
> Roy or others, have you heard of or done any work on the actual depth of
> ground relative to the surface of the earth? I am just musing here, hoping
> to ferret out some explanation for the differences between modeling and
> ehsjr's measurements.
>
> 73,
> Ed Hare, W1RFI

I'm not sure what you mean by the "actual depth of the ground". Do you mean, what is the depth (or distance below an antenna) you could place a perfect ground to produce the same pattern and/or impedance as you'd get over real ground?

If that's what you're asking, the answer is that there isn't any such depth. Or are you asking something else?

Roy Lewallen, W7EL

3825. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k3bu@aol.com
Message-ID: <20000929185901.22555.00000186@ng-fq1.aol.com>
Source record: 179051

>
>I know I can paw around in the Archives and find it, but asking may be
>quicker. JUst what was the Grant Chip and Co. got, and what was the
>issuing agency? My Congresman needs to know.
>
>Bill-W4BSG

under:
http://www.sbirsttr.com/Awards/SrchResultsDtlsForm.asp?RanNo=8
you can find the following:

<<<<<
Program: SBIR
Agency: ARMY Field Office: CECOM
TOPIC Number: A96-067 Control Number: A962-1463
Contract Number: DAAB07-97-C-B602 Phase: 1
Awarded In: 97 Award Amount: $98,495
Award Start Date: 01NOV96 Award Completion Date: 01MAY97

Proposal Title: High Performance Miniature Antennas for Hand-Held Personal
Communication Systems (PCS)

Principal Investigator Name: Nathan Cohen
Principal Investigator Phone: 617-489-6952

Firm

FRACTAL ANTENNA SYSTEMS, INC.
Suite 1218 5100 North Ocean Blvd.
Fort Lauderdale, FL 33308

Woman Owned: N
Minority Owned: N
Number of Employees: 4

Keywords: MINIATURE ANTENNA FRACTAL ANTENNA
Abstract: We propose to develop miniature antennae built on fractal designs.
The antennae will be built to exhibit the recently discovered advantages of
fractal antennae--shrunken size; broad/multibandedness; reasonable radiation
resistance. These fractal antenna will be designed to accomodate a number of
constricted form factors including: covert or embedded mounting; top mounting;

and multiple mounting. The antennae willbe tested for performance at a variety of frequencies allowing for prototype production for satellite links,cell point to point, and so on. These prototypes will also be directly applicable to commercial use in wireless, cellular,and other consumer telecommunications useages. Miniature embedded fractal antenna of broad bandwidth have the potential to replace most extant commercial designs in hand-held configurations, without breakage and with higher efficiency.

<<<<<

Hope it helps to .....

Yuri, K3BU

3826. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <39D51F19.159A5F9A@hiwaay.net>
Source record: 179052

Thanks very much, Yuri. THats great service!

Bill-W4BSG

Yuri Blanarovich wrote:
>
> >
> >I know I can paw around in the Archives and find it, but asking may be
> >quicker. JUst what was the Grant Chip and Co. got, and what was the
> >issuing agency? My Congresman needs to know.
> >
> >Bill-W4BSG
>
> under:
> http://www.sbirsttr.com/Awards/SrchResultsDtlsForm.asp?RanNo=8
> you can find the following:
>
> <<<<<
> Program: SBIR
> Agency: ARMY Field Office: CECOM
> TOPIC Number: A96-067 Control Number: A962-1463
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> Awarded In: 97 Award Amount: $98,495
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>
> Proposal Title: High Performance Miniature Antennas for Hand-Held Personal
> Communication Systems (PCS)
>
> Principal Investigator Name: Nathan Cohen
> Principal Investigator Phone: 617-489-6952
>
> ---
> ------
>
> Firm
>
> FRACTAL ANTENNA SYSTEMS, INC.
> Suite 1218 5100 North Ocean Blvd.
> Fort Lauderdale, FL 33308
>
> Woman Owned: N
> Minority Owned: N
> Number of Employees: 4
>
> ---

> ------
>
>
> Keywords: MINIATURE ANTENNA FRACTAL ANTENNA
> Abstract: We propose to develop miniature antennae built on fractal designs.
> The antennae will be built to exhibit the recently discovered advantages of
> fractal antennae--shrunken size; broad/multibandedness; reasonable radiation
> resistance. These fractal antenna will be designed to accomodate a number of
> constricted form factors including: covert or embedded mounting; top mounting;
> and multiple mounting. The antennae willbe tested for performance at a variety
> of frequencies allowing for prototype production for satellite links,cell point
> to point, and so on. These prototypes will also be directly applicable to
> commercial use in wireless, cellular,and other consumer telecommunications
> useages. Miniature embedded fractal antenna of broad bandwidth have the
> potential to replace most extant commercial designs in hand-held
> configurations, without breakage and with higher efficiency.
>
> <<<<<
>
> Hope it helps to .....
>
> Yuri, K3BU

3827. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D51EBE.182DB25@bigfoot.com>
Source record: 179053

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "If radiation were dissipative, we wouldn`t even have to bother with
> this newsgroup. :-)"
>
> "Dissipation" is often a bad word implying something we don`t want.
>
> Dissipation can be a synonym for dispersion. A wire can radiate both
> radio and heat. Thus it is dissipative in some sense for both.

Just getting my money's worth out of the IEEE dictionary, Richard. :-)
"dissipation - loss of electric energy as heat" It's not always
undesirable. It's how I heat my house in the winter.
--
http://www.mindspring.com/~w6rca

3828. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D51F33.8CF84C98@bigfoot.com>
Source record: 179054

Rick Littlefield wrote:
> I, for one, would like to purchase a new a copy of "Reflections" ...

A second edition is in the works, Rick, to be published by "Worldradio".
--
http://www.mindspring.com/~w6rca

3829. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000929191656.22413.00000217@ng-da1.aol.com>
Source record: 179055

Thank you, Cecil, and I hope they make a pantload of money off it. Walt deserves that.

Rick K1BQT

3830. Re: Yagi or Log Periodic? Beginner question!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20000929192243.17768.00000172@ng-cr1.aol.com>
Source record: 179056

<<That antenna have to capture the
following freqs:

Channel Freq
02 55.25 --> important
06 83.25 --> important
10 193.25 --> important
12 205.25 --> important
17 489.25
29 561.25
33 585.25
35 597.25 --> important
44 651.25 --> important
46 663.25 --> important
57 729.25
62 759.25>>

How about that old TV antenna? Might work better than ya think, after a bit of tuning...
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

3831. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: rwclark@seanet.com
Message-ID: <39d621a3.4495634@news.seanet.com>
Source record: 179057

On Fri, 29 Sep 2000 17:59:10 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Harrison wrote:
>>
>> Cecil, W6RCA wrote:
>> "If radiation were dissipative, we wouldn`t even have to bother with
>> this newsgroup. :-)"
>>
>> "Dissipation" is often a bad word implying something we don`t want.
>>
>> Dissipation can be a synonym for dispersion. A wire can radiate both
>> radio and heat. Thus it is dissipative in some sense for both.
>
>Just getting my money's worth out of the IEEE dictionary, Richard. :-)
>"dissipation - loss of electric energy as heat" It's not always
>undesirable. It's how I heat my house in the winter.

Hi Cecil,

Look up heat in your dictionary, does it qualify as radiation? Or do
they have two part definitions for that too?

73's
Richard Clark, KB7QHC

3832. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <EA9B5.1843$ai4.352756@news.ntplx.net>
Source record: 179058

CAM <cam2338@bigfoot.com> wrote :

> Just getting my money's worth out of the IEEE dictionary, Richard. :-)

Cecil, you got your money's worth out of that book years ago! :-)

> "dissipation - loss of electric energy as heat" It's not always
> undesirable. It's how I heat my house in the winter.

Mine is heated by chemical conversion -- wood into BTUs.

I supplement the heat in my bathroom with a small heater -- the only device
I know of that is 100% efficient. :-)

73,
Ed Hare, W1RFI

3833. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <a29ats0ba1injvnqu51bhja5ll3q6mvu9v@4ax.com>
Source record: 179059

On Mon, 25 Sep 2000 16:43:46 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>How much longer can we put up with this destructive behavior from one
>spoiled bully? How can we make it stop? The obvious solution, and one
>I'm sure would be effective, is to simply never respond to any post Chip
>makes. But this has been suggested several times, and some of us just
>don't seem to be capable of doing it. Also, new folks keep dropping in
>and naively trying to engage Chip in a meaningful dialog. It's hard to
>watch them get discouraged and disgusted one by one, as the rest of us
>have, without lending support.
>
>We can't keep him from posting, and that's how it should be -- this is a
>public newsgroup. So the only way to cure the problem lies in the way we
>respond. Any suggestions?

My personal solution was to killfile Chip a long time ago. He was only the
second person ever from this group to wind up in the killfile (the other was
the equally childish Cecil Moore). But that wasn't sufficient since some
posters insist on following up on his trolls. Their responses were so
congesting the group that I could no longer spend the time to follow it.
So now I'm reluctantly killfiling those who persist in posting follow ups
to his trolls. That is beginning to whittle down the volume of the group
so that I can follow it again.

I'd suggest that anyone who really wants to deal with this problem should
do the same. Killfile Chip and all who respond to his trolls, particularly those
who respond with canned statements or insults. If people begin to realize that
by responding to Chip they wind up in the killfiles of many of the readers of the
group, they may stop responding to him. Those who persist in responding, we
probably don't want to read anyway because they will have shown themselves
to be too boorish to be worth the time to read.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3834. Re: MFJ-1786? Worth it?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <KifVOZrJ699vPVjCtehqy+++ppa=@4ax.com>
Source record: 179060

f.williams@computer.org wrote:

>Is the HF Loop antenna from MFJ - MFJ-1786 - a 'good' antenna? I am
>considering a house in a restricted area, so a loop in the attic might
>be an option. Any suggestions will be greatly appreciated.
>
>73,
>Fernie/KE4MAI

Get a big attic and string up a few dipoles. More bandwidth. Better signal. Wire is cheap.

An what you save over a loopie antenna will buy you a fine Bird watt meter to help you tune them pesky dipoles!

Bob
k5qwg

p.s. spend $34 and subscribe to QST -- then go to the arrl web site and look at the members-only reviews on all those expensive loop antennas. take their word at qst, not mine...

3835. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <JN9B5.1844$ai4.353498@news.ntplx.net>
Source record: 179061

Roy Lewallen <w7el@eznec.com> wrote:

> I'm not sure what you mean by the "actual depth of the ground". Do you
> mean, what is the depth (or distance below an antenna) you could place a
> perfect ground to produce the same pattern and/or impedance as you'd get
> over real ground?

Not really, I am essentially asking if the surface of the earth is where I should presume the ground I model to be. In my part of the world, the first several inches of soil can be quite dry; would I presume correctly that the antenna will perform as if it were located a bit higher than it really is above the physical surface of the earth under those circumstances?

Hope I am not explaining this too badly. :-)

73,
Ed Hare, W1RFI

3836. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d52710.11530175@news.akorn.net>
Source record: 179062

On Fri, 29 Sep 2000 15:44:45 -0500, "Nick Kennedy"
<nkennedy@tcainternet.com> wrote:

>I think we'd be in big trouble if generators *were* matched to their load.
>Maximum power transfer is not desired. Supplying the connected demand, no
>more and no less, with maximum efficiency is the aim.

So what your saying is, we want ten horspower applied for every
kilowatt out, or something similar?

I don't think so.

>The generator's impedance (especially the real part) is made as low as
>possible. To raise it to equal the load resistance would be destructive.
>
>73--Nick, WA5BDU

The generator's "real part" is raised as the load resistance decreases
(higher resistance load) and decreased as the load resistance
decreases. The dissipative part of the generator's impedance is made
as small as possible within cost limitations.

The feedback loop that sense load current backs-off the generator's
field excitation, which has the effect of raising the non-dissipative
"resistance" of the generator.

If it didn't, the system would have terrible efficiency at middle load
ranges.

Remove the feedback, and adjust the generator's field for proper
operation at a given load, and you'll find in a well designed
generator it acts just like the generator is sourcing through a
resistance close to the load resistance in value...with very little of
that resistance making heat.

73 Tom

3837. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D52767.989CC6B3@bigfoot.com>
Source record: 179063

klocko@toad.net wrote:
> There are 2 voltage waves and 2 current waves at the point of interest.
> Let's say that the phases are all identical to keep things simple. If
> the voltage waves combine and the current waves combine, does
> (E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?

Actually, there are three voltage and current waves forming an
interference pattern at a Z0-match. Neglecting losses, there's
the voltage/current generated waves, the voltage/current reflected
waves, and the voltage/current forward waves. At a Z0-match point,
everything is either in phase or 180 degrees out of phase. At a
50 ohm coax to 300 ohm twinlead junction, we know the ratio Vg/Ig
equals 50 ohms, the ratio V-/I- equals 300 ohms, and the ratio V+/I+
equals 300 ohms. If we assume Pg to be 100 watts and that there is
an SWR of 5.83:1 on the 300 ohm line, then P- equals 100 watts and
P+ equals 200 watts. This gives us all we need to know. Given a
reference of Vg = 71v@zero, Ig = 1.4a@zero, V+ = 245v@zero,
I+ = 0.82a@zero, it's obvious that V- = 173v@180 deg and
I- = 0.58a@zero. The voltage just to the left and right of the
Z0-match is 71v@zero = 245v@zero + 173v@180 and the current just
to the left and right of the Z0-match is
1.4a@zero = 0.82a@zero + 0.58a@zero

These values are all rounded so the equations are not exact
equalities. All phasors are at zero degrees except V- which,
as predicted by theory, is 180 degrees out of phase with I-
--
http://www.mindspring.com/~w6rca

3838. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000929194824.07447.00000202@ng-fm1.aol.com>
Source record: 179064

>My personal solution was to killfile Chip a long time ago. He was only the
>second person ever from this group to wind up in the killfile (the other was
>the equally childish Cecil Moore).

Yo Cecil!

Looks like we are kindred spirits:-)

73
Chip n1IR

3839. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D52D0F.7B9EB3AE@bigfoot.com>
Source record: 179065

Fractenna wrote:
>
> >My personal solution was to killfile Chip a long time ago. He was only the
> >second person ever from this group to wind up in the killfile (the other was
> >the equally childish Cecil Moore).
>
> Yo Cecil: Looks like we are kindred spirits:-)

Gary killfiled me because he couldn't stand to hear IEEE
definitions including the one for "Power Flow Vector". :-)
--
http://www.mindspring.com/~w6rca

3840. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D530CA.80729851@eznec.com>
Source record: 179066

Programs like EZNEC assume that the ground is homogeneous. If the real ground isn't (which I'm quite sure is usually the case), there's probably not a single height at which you can place the homogeneous ground model which will imitate the real ground in every way. I've also questioned whether there are single values of conductivity and dielectric constant which will reasonably imitate a stratified ground, but don't know the answer.

Roy Lewallen, W7EL

"Ed Hare, W1RFI" wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
>
> > I'm not sure what you mean by the "actual depth of the ground". Do you
> > mean, what is the depth (or distance below an antenna) you could place a
> > perfect ground to produce the same pattern and/or impedance as you'd get
> > over real ground?
>
> Not really, I am essentially asking if the surface of the earth is where I
> should presume the ground I model to be. In my part of the world, the first
> several inches of soil can be quite dry; would I presume correctly that the
> antenna will perform as if it were located a bit higher than it really is
> above the physical surface of the earth under those circumstances?
>
> Hope I am not explaining this too badly. :-)
>
> 73,
> Ed Hare, W1RFI

3841. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D52EF9.1262C778@bigfoot.com>
Source record: 179067

Richard Clark wrote:
> Look up heat in your dictionary, does it qualify as radiation? Or do
> they have two part definitions for that too?

Nope, no definition for "heat".
--
http://www.mindspring.com/~w6rca

3842. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D5300B.340D308A@bigfoot.com>
Source record: 179068

Rick Littlefield wrote:
> Thank you, Cecil, and I hope they make a pantload of money off it.

There sure seems to be a lot of pent-up demand.
--
http://www.mindspring.com/~w6rca

3843. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:01:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39D3DC7C.CDC5FF9@bellatlantic.net>
Source record: 179104

"George, W5YR" wrote:

> I do not mean this personally so put the blow torch away! <:}

LOL! Who the hell am I to flame anybody for something
technical about antennas! Besides, try as I might, I can't find
anything in your post to flame.

> I am much more inclined to believe the prediction that EZNEC makes than
> to accept what your analyzer reads under the experimental conditions you
> described.

Me too. That's why I am so puzzled. I've NEVER had a dipole whose
minimum swr after pruning was 1:8 to 1. That's why I asked others to
experiment and post their results. And why I asked Ed to check it out,
to ensure that there wasn't a "finger check" when he ran the program.

A possible answer came in E-mail. It said: "Note that minimum SWR
is not always consistent with resonance." And Ed's post talked about
1:8 to 1 at resonance - it didn't say minimum swr.

Ok that said, I went further. I attempted to build a stiff wire antenna
to avoid the effects of end loops/insulators. This was a half-assed
antenna. I made it out of #6 bare copper wire. I had to use a 26"
piece of 1/2 plywood in the center - I mounted the elements to that.
It worked temporarily, but the elements would slowly sag. Anyway,
I screwed the wood to the top of an 8' 2x4 and the swr was flat (could
just barely see the needle move on the swr meter) at the design frequency.
But when I moved the thing close to the house, the swr went up to about
1:7 to 1. Unfortunately, I couldn't move the thing around as I hoped without
causing the elements to sag before the motion was complete, so I can't
say that changes were solely due to proximity to the house. Sigh. I guess
I'm going to have to get fiberglass poles to simulate sideband's antenna.

I then disassembled a 3 element 6 meter yagi that I've been experimenting
with. (Trying to learn stuff you guys already know.) I kept the driven element
on the boom. Swr was flat after adjusting the gamma. This is a monopole,
so it doesn't count - but I still get a flat swr. I put together a shortened
copper pipe (1/2 inch) dipole fed thru a 5 turn coil wrapped on a broom handle
and I can adjust that flat, too, by compressing/expanding the coils.

Bottom line - I can get the swr below 1:2 to 1 on all of these antennas.
Sideband's dipole gets a minimum of 1:8 to 1 and goes up on either
side of that (or it did, before he moved the coax). So I still maintain
that there is (or at least was) something wrong when the minimum
swr was 1:8 to 1, and I challenge Ed's assertion that the antenna
is working perfectly. Maybe it should be 1:8 to 1 at resonance -

but I can't see it being 1:8 to 1 minimum in the absence of effects
other than being 8' above ground. I believed then, and still believe
that it is the effects of being near the structure that are causing
the minimum Swr to be 1:8 to 1 (originally) and 1:4 to 1 (now).
I believe that the antenna should be able to be adjusted so that
the minimum swr will be below 1:2 to 1 if it is installed 8' above the
ground in the clear.

Does EZNEC insist that a 50 mhz dipole (8' above ground but
otherwise clear of influence of nearby objects) at *minimum* swr
will be close to 1:8 to 1 ? If so, it is wrong.

Another question: I've always thought that a dipole exhibited minimum
swr close to resonance - again, assuming it is in the clear of objects
other than ground.

> Your results simply do not agree with the theoretical basis
> on which that antenna is working. There are just too many things that
> can take place in any experiment, no matter how well contrived and
> executed, that can produce results that differ from "theory."
>
> In itself, those results do not disprove "theory" rather they raise
> doubt as to be validity of the experimental conditions.
>
> I know that you are trying here and doing a yeomanlike job at it, but
> don't be too quick to write off decades of work in this area on the
> basis of a ten-minute experiment. And, as gently as I can put it, I
> would not rely completely on the accuracy of that analyzer.
>
> Please keep us posted on your work - this is interesting stuff!
>
> --
> 72/73, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)
>
> ehsjr@bellatlantic.net wrote:
> >
> > W1RFI wrote:
> >
> > > >From: sideband@mindspring.com
> > >
> > > > I have a MFJ 9406 (6 M) SSB radio and a dipole antenna. I also
> > > > have the use of a MFJ 259 analyzer. I am only able to put
> > > >this antenna about 8 feet in the air as I live in a 'no antenna' apt.
> > > >complex and currently have it hidden under the wooden balcony
> > > >of the apartment above me. The SWR is currently about 1.8 at 50 MHz.
> > >
> > > This is almost exactly what EZNEC predicts for a 6 M dipole 8 feet above
> > > ground. The antenna, when resonant, would have a feed-point impedance of 90

> > > ohms, an SWR of 1.8:1 to a 50 ohm feed line. The antenna is working perfectly.
> >
> > Ed, I've got a real problem with that. By real problem, I mean:
> > I went out and threw together a 6 meter dipole out of zip cord,
> > hung it at 8' (actually, 102 inches and also re hung at 95 inches)
> > and got a flat SWR on the MFJ 259. The analyzer needle barely
> > moved. I then remade the dipole - no loops at the end, and wire-tied
> > it to a nylon messenger rope. At 92 inches height I got 1.4 to 1. I
> > assume the difference is due to the wire ties and the fact that the
> > antenna was in contact with the support rope for its full length.With
> > no end loops it had minimum swr at about 52.3 mhz. With end loops
> > (to tie the support ropes to it) the minimum SWR was at about 56.1
> > I would have used egg insulators instead of loops if I had some on
> > hand. The feedpoint is an S0-239 with about 20' of RG 58. I added
> > a 4' coax extender cable and re-measured each time - no change in
> > the swr. The antenna was installed over wet soil, and the nylon rope
> > was slightly damp from laying on the grass for about 5 minutes.
> >
> > Ok, that said, the reason I did this is that I've never built a dipole
> > with a 1:8 to 1 SWR after pruning. I find the cited EZNEC figure
> > hard to believe - so hard that I had to check it. I still intend to do
> > more checking, but bottom line, I find the EZNEC number
> > highly suspect. Could you please re-check it? I don't have
> > EZNEC so I can't. I would also ask others to spend a few minutes
> > building the antenna and posting the SWR minimums they find.
> > You only need to split 5 feet of zip cord (or use 10 feet of single
> > conductor) and an S0-239 (or just solder the coax to the elements)
> > and can slap the thing together real quick. I'm going to re-do
> > my experiment, using egg insulators. If there was no "finger check"
> > when you ran it and EZNEC gives 1:8 to 1 then real world measurements
> > have to come in very close or need an explanation as to why they
> > are so far off. According to my analyzer, the antenna was 50 ohms
> > at resonance. The analyzer checks out into a dummy load, and
> > measurements with my bird and 2 swr meters (Daiwa cross needle
> > and Welz) on my antennas have compared the same as with the analyzer
> > in the past (I did not check today) so I don't think there is anything wrong
> > with it. I really suspect that EZNEC figure.

3844. Re: Standards

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:05:13 UTC
From: william ewald <wgewald@att.net>
Message-ID: <mqm7tsg8176te3khr0uctmcqe5sv1t9hp0@4ax.com>
Source record: 179105

On Wed, 27 Sep 2000 23:19:09 GMT, rwclark@seanet.com (Richard Clark)
wrote:

>On Wed, 27 Sep 2000 16:53:39 -0500, CAM <cam2338@bigfoot.com> wrote:
>
>>
>>But this may be akin to saying that the yardstick at the NBS is not exactly
>>a yard long. Exactly how far can a real world Conjugate Match deviate
>>from an ideal Conjugate Match and still be called a Conjugate Match. Are
>>we talking 0.000001% accuracy or 10% accuracy?
>>--
>>http://www.mindspring.com/~w6rca
>
>Hi Cecil,
>
>The yardstick is in Paris. And it isn't a yard long (unless we're
>talking about about 10% accuracy).
>
>73's
>Richard Clark, KB7QHC

Isn't NBS now NIST, and the standard meter, not a platinum
meter stick but 1,659,763.73 vacuum wavelengths of light resulting
from unperturbed atomic energy level transition 2p10 ï¿½ 5d5 of the
krypton isotope having an atomic weight of 86 (= 1m/1,650,763.73 =
0.605,780,211 ï¿½m)?

3845. Re: Toytennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:10:38 UTC
From: william ewald <wgewald@att.net>
Message-ID: <ebn7tss1gm0ii02tccb0o8col7sod8eb31@4ax.com>
Source record: 179106

On 28 Sep 2000 14:41:38 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>... your toy-tennas for which you
>steadfastedly refuse to provide any cogent explanation, instead petulantly
>referring anyone who asks to a non-existant website "explanation" to search in
>vain for something -anything!- that would confirm that they are anything more than
>some fancifully decorated version of longstanding concepts, are ...
>outrageous.

That reminds me. What is "power pattern agility" in an antenna?

3846. Re: Missing out

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:16:00 UTC
From: william ewald <wgewald@att.net>
Message-ID: <kin7tsgj8muf5ckcj1qg97hmk9s7rgm077@4ax.com>
Source record: 179107

On Thu, 28 Sep 2000 12:41:25 -0600, Martin Meserve
<meserve@my-deja.com> wrote:

>Zoran Brlecic wrote:
>>
>> First of all, I would like to apologize for off-topic posting
>> on this ng which clearly deals exclusively with something
>> called "fractal" antennas...
>
>Most people put filters in so that they never see that stuff.
>For myself, I just ignore any of the posts that have to do
>with that stuff. However, don't refrain from posting. If
>everybody did that, just because of the garbage, we would
>miss out on a lot of good information.

I was interested in a fractal antenna for 440 Mhz, and in the theory
behind the idea of possible benefits of the type, but the person I
though might have the answers was as coy as Sally Rand in her
fan-dance routine.

3847. Re: no new postings

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:20:08 UTC
From: william ewald <wgewald@att.net>
Message-ID: <d2o7ts0rj6ch3fekd5q2piif5juarbom0b@4ax.com>
Source record: 179108

On Thu, 28 Sep 2000 15:22:08 GMT, fjones@ionet.net (frank jones)
wrote:

>Thanks all for your replies. The problem was with Forte Free Agent.

I've found the registered version well worth the price.

3848. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:25:34 UTC
From: william ewald <wgewald@att.net>
Message-ID: <59o7tsomlidil4r6njapvif9dvhf8jqj97@4ax.com>
Source record: 179109

On Thu, 28 Sep 2000 21:59:06 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:

>
>
>To date, no accurate or informative data has been presented...
> and there is no evidence for better performance
>than any other small or linearly loaded antenna (and that
>performance is poor).
>
>On the contrary recent research shows that, for a given size,
>any properly designed antenna will perform better than the
>fractal antenna.

I was prepared to believe the claims at one point (what do I know, my
training is in biology). Now I am convinced that you are right.

3849. Re: Toytennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:28:54 UTC
From: fractenna@aol.com
Message-ID: <20000928202854.28388.00001116@ng-fc1.aol.com>
Source record: 179110

>That reminds me. What is "power pattern agility" in an antenna?
>

Hmmm...where did you see the term used? If I used it, I suspect it would be in context.

An ARRAY can provide power pattern agility through the changing of the spatial frequency spectrum and weighting. Fractals have some very useful attributes in this regard, but that is beyond the general scope of interest of this NG.

73
Chip N1IR

3850. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:41:40 UTC
From: ehsjr@bellatlantic.net
Message-ID: <39D3E604.A0A5DB82@bellatlantic.net>
Source record: 179111

Ed,

Thanks for the pointers to the .pdf files. (Maxwell & Lau)
GOOD stuff!

"Ed Hare, W1RFI" wrote:

> Dan Richardson <k6mhe@arrl.net> wrote:
>
> > Really admire your responding. I only wish you could respond outside
> > you role at ARRL HQ, but understand your choosing not to do so.
>
> Hi, Danny,
>
> It is not even a question of my being permitted to respond outside my role
> at ARRL HQ; it is a question of my not being able to respond with what I
> believe to be accurate information. There certainly are questions about
> whether conjugate matching has been applied correctly in all cases
> (amplifier loading, for example). But, that notwithstanding, the articles
> are still a really good, albeit lenghty, explanation of SWR. IMHO, it is a
> question of technical, not ego, issues.
>
> I have not gone through all of the math and steps so I really can't say that
> I fully understand all of the principles that are on the plate, so rather
> than offer what I would not feel certain of, I stick to what I know. I
> don't mind having a bit of egg on my face once in a while from a technical
> faux pas, but if I do, it is because I honestly misunderstood something.
> But I do not want to offer speculation instead of fact, especially coming
> from the ARRL Lab. Zack is more qualified than I to address it, and he did,
> in the July/August QEX (URL previously posted).
>
> Heck, those who have seen me post know that, if I feel comfortable that I
> know the answer, I am more than willing to post about a wide range of ARRL
> topics, including, in some cases, my perceptions of the sense of the ARRL
> Board. :-) There are times when discretion is required in my public
> participation (publications plans, in-progress work with Board committees,
> etc.) but this isn't one of them. Sorry, but it really isn't that Ed knows
> something that he is not telling. :-)
>
> 73,
> Ed Hare, W1RFI

3851. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:42:04 UTC
From: fractenna@aol.com
Message-ID: <20000928204204.28388.00001122@ng-fc1.aol.com>
Source record: 179112

>
>On Thu, 28 Sep 2000 21:59:06 GMT, Gilbert Mouget
><gilbert.mouget@waika9.com> wrote:
>
>>
>>
>>To date, no accurate or informative data has been presented...
>> and there is no evidence for better performance
>>than any other small or linearly loaded antenna (and that
>>performance is poor).
>>
>>On the contrary recent research shows that, for a given size,
>>any properly designed antenna will perform better than the
>>fractal antenna.
>

The evidence is compelling and over almost 25 years old.

Random fractals, for example, have long been shown to be optimized antenna.
That includes optimized compared to other loading schemes.

Recent examples of random fractals, called 'genetic antennas' also follow said
optimzation.

A good place to start is:

OPTIMIZATION OF WIRE ANTENNAS by Landstorfer and Sacher, Wiley Interscience,
1985.

The data on deterministic fractals is also compelling. This includes recent and
as yet unpublished work done on DoD and commercial contracts.

This work will appear next year.

>I was prepared to believe the claims at one point (what do I know, my
>training is in biology). Now I am convinced that you are right.
>

Ignorance is its own reward. If you consider that one is allowed to ignore
publications such as Electroics Letters; Fractals, IEEE Transactions; and many
others, then I imagine that it is possible to believe that one should have an
OPINION on said matters.

The minute that science becomes an enterprise where one must put OPINION above
fact is the minute I leave it.

Haven't seen an exit door yet, nor a reason to look for it.

Incidentally, I am astounded that a so-called antenna person doesn't even know what a fractal is...and calls his so-called novel designs 'random.'

73
Chip n1IR

3852. Re: Toytennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:43:50 UTC
From: fractenna@aol.com
Message-ID: <20000928204350.28388.00001124@ng-fc1.aol.com>
Source record: 179113

```
>
> 29 Sep 2000 00:28:54 GMT dans l'article
> <20000928202854.28388.00001116@ng-fc1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:Fractanals have some very useful attributes in
>:this regard (ie: enemas), but that is beyond the
>:general scope of interest of this NG.
>
>Translation ? ? ?
>
>--
>Gilbert.
>
>
>
```

Translation:

This is a bastardized version of a quote and not something I said nor would ever say.

It is indicative of the overall absence of viability manifest by a majority of posts on this NG.

Hope this helps.

73
Chip n1IR

3853. WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:46:25 UTC
From: fractenna@aol.com
Message-ID: <20000928204625.28388.00001125@ng-fc1.aol.com>
Source record: 179114

I want to alert NG readers that at least one individual is attempting to spam this NG with a bogus 'fractenna' alias. The recent attempt entailed a chain letter scheme.

:-(

This will not happen, thanks to the helpful interaction of the folks at UCSD, who have contacted me and to whom I have conferred with.

73
Chip N1IR

3854. Re: NEC4 Model of MI2 Fractal Loop Vs ...Who Knows ??

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 00:47:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <8ERA5.3956$7I4.217520@bgtnsc04-news.ops.worldnet.att.net>
Source record: 179115

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:2209-39D3CA3A-26@storefull-113.iap.bryant.webtv.net...

Statement 1:

> Ed Hare wrote:
> " G = eff*D
> So an inefficient antenna (ie, loopstick) can have directivity, but no
> gain."
>

Statement 2:

> "Directive gain depends entirely on the distribution in space of the
> radiated power. The power input to the antenna, the antenna losses, or
> the power consumed in a terminating resistance have nothing to do with
> directive gain."
>

When someone speaks of directive gain, they mean directivity. Ie. An antenna does not provide gain as in power amplification (total radiated power can never be greater than delivered power) but rather gain as a function of directing energy, hence directive gain aka directivity.

Both statement 1 and statement 2 above say exactly the same thing. Both are correct.

Steve

3855. Bird Cage

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 01:07:58 UTC
From: Wim ELBERS <wimelbers@skynet.com>
Message-ID: <8r0q0m$af1$1@news1.skynet.be>
Source record: 179116

I'm looking for somebody who can explain how to tune a 28MHz Bird Cage Quad (with reflector).
tnx ON6TZ, Wim

3856. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 01:35:54 UTC
From: fractenna@aol.com
Message-ID: <20000928213554.15704.00000045@ng-ff1.aol.com>
Source record: 179117

>NEC analysis prove the contrary and is avaible for anybody
>to check. Download Mi2.zip (only 9 Ko)

Excuse me; it is not available to "anyone to check". It is available to members of the fractal antenna reflector only, at their request, and with certain reasonable conditions. This file, and any derivatives in which said antenna design is easily recognized, is copyrighted material to Fractal Antenna Systems, Inc.

Any unauthorized publication and distribution constitutes copyright infringement under U.S. copyright law.

If you are aware of any infringers as described above, please notify me ,and Fractal Antenna Systems, Inc. will notify the infringer and request that they remove said file from publication and distribution, under penalty of suit.

Thank you for your assistance.

Nathan Cohen, Ph.D.

3857. Re: Toytennas

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 01:36:53 UTC
From: fractenna@aol.com
Message-ID: <20000928213653.15704.00000046@ng-ff1.aol.com>
Source record: 179118

```
>
> 29 Sep 2000 00:43:50 GMT dans l'article
> <20000928204350.28388.00001124@ng-fc1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:It is indicative of the overall absence of viability manifest by a majority
>of
>:posts on this NG.
>:
>:Hope this helps.
>
>Yes it does, because the majority of posts on this newsgroup
>comes from Fractenna <fractenna@aol.com>
>
>--
>Gilbert.
>
```

Hardly.

Lately they seem to come from Bill Aycock and you.

73
Chip n1IR

3858. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:00:11 UTC
From: fractenna@aol.com
Message-ID: <20000928220011.22419.00000080@ng-da1.aol.com>
Source record: 178969

>
>Anyone can check this out...the TRUTH.
>
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>

The truth is that Mr. Clarke has posted unauthorized copyrighted file and images which thus constitute copyright infringement. Mr. Clarke was sent a request on August 14 to remove said material.

If he does not do so, as the letter so stated, by 15 October, 2000, he will be liable for any and all costs, including attorney fees, incurred in the ppotection of said copyright material held by Fractal Antenna Systems, Inc. The K2 Fractal Flyer file and images have been so identified.

Now, Mr. O'Neal:

Could you kindly tell us how it is possible that Mr. Clarke--that is the "TRUTH"--can possibly compare the IMPEDANCE of this K2 Fractal Flyer antenna over real and perfect grounds, and come to the conclusion that it has 15 ohms of ground losses??

If we compare, for example, the 'H' antenna with the K2 (and note that the K2 has higher field strength at low angles BTW) , we see that there is fairly little change in feed impedance for the H when it is placed over perfect ground and real ground. Are we to conclude--based on Mr. Clarke's logic--that the 'H' antenna thus has BUILT IN ground losses--even over perfect ground?

Or shall we conclude that Mr. Clarke does not understand the implementation (oin this case)of ohm's law; wishes to infer ground loss resistance by a comparison where the power pattern and current max position changes, and so on?

This is a fairly typical example of the incorrect info that Mr. Clarke has provided on this site--independent of copyright infringement. It is a pity that readers are misled by this.

Curious to know your comments on this.

Chip N1IR

3859. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:03:12 UTC
From: fractenna@aol.com
Message-ID: <20000928220312.22419.00000081@ng-da1.aol.com>
Source record: 178970

```
>
>
> 29 Sep 2000 01:35:54 GMT dans l'article
> <20000928213554.15704.00000045@ng-ff1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
>:>NEC analysis prove the contrary and is avaible for anybody
>:>to check. Download Mi2.zip (only 9 Ko)
>:
>:Excuse me; it is not available to "anyone to check". It is available to
>members
>:of the fractal antenna reflector only, at their request, and with certain
>:reasonable conditions. This file, and any derivatives in which said antenna
>:design is easily recognized, is copyrighted material to Fractal Antenna
>:Systems, Inc.
>
>Too late, it is also avaible to subscribers of alt.binaries.warez.
>The one that Milosevo Milosevic, a friend of my ex-brother in law,
>downloaded on alt.binaries.warez was not copyrighted.
>
>Go and sue the moderator of alt.binaries.warez
>
>:Any unauthorized publication and distribution constitutes copyright
>:infringement under U.S. copyright law.
>:
>:If you are aware of any infringers as described above, please notify me ,and
>:Fractal Antenna Systems, Inc. will notify the infringer and request that
>they
>:remove said file from publication and distribution, under penalty of suit.
>
>ARE YOU AFRAID OF THE TRUTH DOCTOR FREACKTENNA ?
>
>The truth is avaible to anyone. Every potential customer,
>even the NASA or the US airforce, should be aware that all
>your fractal BS is only a scientific hoax.
>
>--
>Gilbert.
>
```

Well, then show us what the 'hoax' is. What's stopping you?

I was unable to locate the files you mentioned.

73
Chip n1IR

3860. Re: VHF/UHF Ham/Business Band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:05:02 UTC
From: Bill Crocker <bcrocker@home.com>
Message-ID: <iNSA5.13841$hD4.3671477@news1.rdc1.mi.home.com>
Source record: 178971

151~155MHz on VHF, and around 462MHz on the UHF side.

Thanks,
Bill Crocker

"'Doc" <w5lz@oio.net> wrote in message news:39D3DC99.16684512@oio.net...
>
>
> Bill Crocker wrote:
> >
> > Are most base, dual-band antennas designed for Ham radio, close enough
to be
> > used for the VHF/UHF business bands? Or should I buy an antenna
designed
> > for those bands?
> >
> > Thanks,
> > Bill Crocker
>
> First question, what business band frequency? And I think I'd
> ~buy~ an antenna designed for the band I was using.
> 'Doc

3861. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:19:16 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <E_SA5.10303$tl2.738063@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178972

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D3F214.DD3DF7F8@bigfoot.com...
>>. The Z0-match point is where
> the reflections are neutralized
>and their energy joins the forward waves
> such that forward power equals generated power plus reflected power.
> --
> http://www.mindspring.com/~w6rca

The Zo match point is where multiple rearward traveling waves combine such that the total rearward traveling wave is zero (wave cancellation) , hence the steady state match.

The only energy "joining" the forward traveling wave is the energy that is partially re-reflected at the point of reflection, which, in the case of the tuner, is not at the match point.

I told Walt that I would not debate these particular points on usenet again. Would you prefer to take this topic offline?

Steve

3862. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:34:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r0v30euh0@208.206.142.83>
Source record: 178973

Ed Hare, W1RFI wrote:

> Dick Carroll <dixie@townsqr.com> wrote:
>
> > > Why do you use the term "travesty" here, Dick? ARRL clearly has no
> prejudice
> > > against Maxwell or the concepts presented in Reflections.
>
> > That may be clear to you, Ed but it "clearly" is not clear to many others.
>
> In what you posted, it looked to me that you felt your opinion was perfectly
> clear.
>
> > If this is untrue, its past time for the League to end their silence on
> the
> > matter and explain.This wouldn't be the first time controversies have been
> merely
> > swept under the rug, rather than beng worked out to a *best result for
> ham radio*
> > by the League.
>
> The one who is in a position to explain the decisions about the content of
> ARRL books is Joel Kleinman, N1BKE, the Book Team Supervisor. Are you
> telling us that he did not respond when you asked him for an explanation?
>
> > 1. I hear many hams are looking for the book but can't find it.
>
> The book was based a lot on the original series of QST article, "Another
> Look at Reflections." The articles are still published on the ARRL CD ROMs
> and are available for download at:
>
> http://www.arrl.org/tis/info/pdf/Reflect.pdf
>
> Does the fact that ARRL still makes the articles available change your mind
> about the conspiracy theory, Dick?

I don't do conspiracy theories, Ed, but when the volume of rumors and commentary was way too extensive to be ignored and the question marks began toappear. Meanwhile Walt's book and other material disappeared from League pubs and sales lists...And the book contains considerably more expanded material than the QST articles - I have all those QST issues. As I recall Walt stated in the book the he was never able to finish the QST series thus they are incomplete..

3863. Re: Yahoo! Finance Story - Yahoo - Fractal Antennas: 'Cease and Desist' Notification of Copyright Violation to Radio Ham

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:34:17 UTC
From: Mike Camp <mikerobin@home.com>
Message-ID: <JcTA5.261353$i5.3597481@news1.frmt1.sfba.home.com>
Source record: 178974

Hello-

At the bottom of the Yahoo news item that Dr. Cohen sent to the group, there was an opportunity to comment to Yahoo on the piece. Does anyone care to share their personal opinion of the facts of the case with Yahoo? Besides me, of course!

Usual caveat: This may move you up in the line to be sued by Fractenna Antenna Systems...

Mike Camp KI7FQ
El Cerrito, CA.

3864. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:38:03 UTC
From: fractenna@aol.com
Message-ID: <20000928223803.22237.00000063@ng-da1.aol.com>
Source record: 178975

>Post a file here the refutes the objective evidence presented in:
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>

I will be happy to.; but you need to explain the conundrum so posed, as I requested.

Readers surely benefit from the over-documented modeling and data available on:

http://www.fractenna.com/ham/hampage6.html

One obvious clincjher there is the relative comparisons to other antennas.

>Are you even capable of a clear description matching:
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>

Yes; but just so you know, 4 people worked on the K2 Fractal Flyer description, either in writing or editing or raising points that needed to be addressed. Again, see:

http://www.fractenna.com/ham/hampage6.html

>Explain why this model is not correct:
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>

Certainly. See

http://www.fractenna.com/ham/hampage6.html

>This has nothing to do with copyright which has NOT
>been violated in any way so please, Mr Cohen, why is this model incorrect?
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>
>We are waiting to see an answer as concise and definitive as:
>http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>

It is simply WRONG. There is NO 15 dB of ground losses.

See:

http://www.fractenna.com/ham/hampage6.html

73
Chip n1IR

3865. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 02:54:30 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r1096euh1@208.206.142.83>
Source record: 178976

William E. Sabin wrote:

> The Conjugate Match Theorem means exactly and precisely what it says:
>
> "If a group of four terminal networks containing only pure reactances are
> arranged in tandem to connect a generator to a load, then if at any junction
> there is a conjugate match of impedances, there will be a conjugate match of
> impedances at every other junction in the system".
>
> We are not allowed to play any games with this. It is complete and covers all
> contingencies. There are no exceptions.

So it appears the Conjugate Match Theorem is useless in describing any real-world network, since there exists no such thing as a completely lossless four terminal network that I am aware of. It is not to be used outside the realm of theory. Otherwise it's only useful application would seem to be exactly as Walt Maxwell has utilized it - to approximate what happens.

73, Dick W0EX

3866. MFJ-1786? Worth it?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 03:38:52 UTC
From: f.williams@computer.org
Message-ID: <39D40F11.42A8E450@computer.org>
Source record: 178977

Is the HF Loop antenna from MFJ - MFJ-1786 - a 'good' antenna? I am considering a house in a restricted area, so a loop in the attic might be an option. Any suggestions will be greatly appreciated.

73,
Fernie/KE4MAI

3867. Help with 8 element Yagi design for beginner.....

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 04:02:19 UTC
From: alex <A_L_E_X1@yahoo.com>
Message-ID: <970200042.203229@nomad.vif.com>
Source record: 178978

Hi, everyone!

1. Who can tell me where to find a step-by-step guide about 8 element Yagi design?
I want to construct it by myself, but i don't know much about radio freqs and other related stuff.
Please Help!!!

2. Is there somebody from Montreal, Quebec, Canada? I want to know if a Yagi antenne will help me with capturing channels: 2, 6, 10, 12, 17, 31, 33, 35, 44, 46, 53, 62. The important ones are: 2, 6, 10, 12, 33, 35, 44, 46.
Is it possible to capture all of those with one antenna and will i see it fine or not? Maybe you had the same situation?

Thanks

A_L_E_X1@YAHOO.COM

p.s. you can reply on this group or you can send me an e-mail.

3868. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 04:18:43 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <39D41823.25A8CC95@tir.com>
Source record: 178979

Dear Group:
That is about what a group of our faculty who teach circuits decided. It is interesting, but practical uses are few. Little, if any, time is spent on the theorem any more. It might be mentioned as an example of intellectual excess as it was misused (some time before I was born) to prove that electrical power plants could not be built - half the power generated would be dissipated in the power house resulting in melted power houses. [I understand the error of this as well as you do!]
Cases exist where matching to reduce reflections is important.
The most embarrassing moment of my life occurred when, as a grad student of John Kraus, I blurted out in the middle of one of his wonderful lectures that he was wrong to optimize the front end of low noise receivers by conjugate matching their inputs. I muttered something about "well, that was close, but there were other considerations." I shot out of the class (when it was over) to my apartment (almost across the street) and wrote him a paper where I proved that for best s/n ratio the front end needed to be slightly mismatched. Ran back to his office and slipped the paper under his door. We never exchanged a word about the incident and, so I heard, the lecture was changed. He is a great man and a great teacher, but the darn theorem causes things like this to occur - it is too alluring. As the old phrase has it, in handgranades and matching, close is good enough. ....and it is now so late that all theorems are true and all women are beautiful.....
73 Mac

> So it appears the Conjugate Match Theorem is useless in describing any real-world
> network, since there exists no such thing as a completely lossless four terminal
> network that I am aware of. It is not to be used outside the realm of theory.
> Otherwise it's only useful application would seem to be exactly as Walt Maxwell has
> utilized it - to approximate what happens.
>
> 73, Dick W0EX

--
J. Mc Laughlin n8tt@tir.com Michigan ~

3869. Wanted: SGC SG-237 or SG-231

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 05:02:30 UTC
From: jhulet@aol.com
Message-ID: <20000929010230.05250.00000151@ng-bg1.aol.com>
Source record: 178980

Hello,

I am looking for a SGC SG-237 or a SGC SG-231 Smartuner. Anyone have one in excellent condition for sale?

Thanks

Jason S. Hulet
W1WOW

3870. Re: WARNING: BOGUS SPAM ATTEMPTS

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 06:05:13 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <0bWA5.25001$3e2.3256@newsfeed.slurp.net>
Source record: 178981

SPUGM

K3BHJ

3871. Penalty

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 20:21:20 UTC
From: william ewald <wgewald@att.net>
Message-ID: <7cu9ts4iot2eh7j3lbsmkkspn0bbfihil2@4ax.com>
Source record: 178939

On Fri, 29 Sep 2000 01:53:04 GMT, Gilbert Mouget
<gilbert.mouget@waika9.com> wrote:
>:
>:If you are aware of any infringers as described above, please notify me ,and
>:Fractal Antenna Systems, Inc. will notify the infringer and request that they
>:remove said file from publication and distribution, under penalty of suit.
>
>ARE YOU AFRAID OF THE TRUTH DOCTOR FREACKTENNA ?

I'd just like to know what "under penalty of suit" means, if anything.

3872. Re: WARNING: BOGUS ROT13

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 20:26:05 UTC
From: william ewald <wgewald@att.net>
Message-ID: <qnu9tsou251ijv1ksharob4t67rbe7iigl@4ax.com>
Source record: 178940

On Fri, 29 Sep 2000 02:05:13 -0400, "David J. Windisch"
<davidw@copper.net> wrote:

>SPUGM
>
>K3BHJ
>

FCHTZ?

3873. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 23:13:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r37ju$o44$1@uranium.btinternet.com>
Source record: 178941

As the frequency is swept over the band, minimum SWR with
the meter located immediately at the transmitter always
corresponds to a resonance in the tuner+feeder+antenna
system. If it doesn't then suspect your measurements or the
computer program you are using.

Resonance means that at that frequency there is a purely
resistive load, R+j0, presented to the transmitter.

Only when the purely resistive load is 50 ohms will the SWR
be 1:1. Assuming, of course, you can trust your SWR meter.

Other values of SWR mean that the purely resistive load is
greater or smaller than 50 ohms, but there's no way of
determining from the SWR meter reading which of the two
alternatives applies.

Take your pick ! Fortunately it doesn't matter very much
with modern amateur transmitting equipment what it is -
provided the SWR is less than 1:5 which means the resistive
load on the transmitter is between 33 and 75 ohms.

Be thankful Japanese transmitting equipment manufacturers
allow for such wide variations in expected antenna
performance.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

3874. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-29 23:48:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r39na$h2$1@uranium.btinternet.com>
Source record: 178942

With an inverted V resonant dipole the feedpoint resistance
is more likely to be nearer to 50 ohms than a high
horizontal 1/2-wave dipole. The angle included in the V
actually reduces radiation and feedpoint resistance.

So you could deliberately deform your horizontal dipole into
a V just to provide a better match to your 50-ohm line.

DON'T DO IT !

The loss in height, the increase in ground-induced loss, the
reduction in radiation resistance, considerably outweigh any
slight improvement obtainable from a questionable better
match to the feedline.

If backyard space forces you to use an inverted V try to get
the apex as high as possible above ground or house. And
make the included angle between the two halves as large as
possible.

A resonant inverted V may be 2 or 3 percent shorter than a
resonant dipole due to an increase in capacitance to ground.
It depends on height above ground. When the whole antenna is
above 1/4-wave in height forget a change in length.

This is really a very small amount and whether using a V or
or horizontal dipole always allow for a teeny bit of
pruning.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Jim Pennino <jimp@mail.specsol.com> wrote in message
news:j7v2r8.7df.ln@mail.specsol.com...
> Wayne Jones <wrjones1@home.com> wrote:
> > Well, thanks to this newsgroup, I have been able to
settle on the best
> > antenna for my 20m cw qrp operation.
>
> > I plan to put up a 30 foot mast made of fence top rail.
The mast will extend
> > about 14 feet above the edge of my 2 story house.
> > With the antenna attached to the ends of the roof I get
an inverted V with

> > legs of 21 feet and an angle of 90 degrees.
> > With the active part of the leg at about 16 feet on each
side, the remaining
> > wire will elevate the antenna about 3 feet above the
rain gutter that runs
> > along the edge of the roof under the antenna and should
keep the ends out of
> > the snow in winter. I will use a plastic plumbing pipe T
to insulate the top
> > of the metal mast from the antenna wire.
>
> > I understand that with an inverted v, the legs have to
be slightly longer
> > than a horizontal dipole. Is it possible to come up with
a good guess as to
> > what the length should be?
>
> > Also, will the impedance be around 50 ohms at the
center? I understand that
> > the impedance varies with the angle of the V.
>
> > Tnx
> > Wayne Jones
> > ve3gqx
>
>
> As I recall, the resonant frequency goes down and the
impedance goes down
> as you swing the legs away from horizontal. Mine wound up
at 48 Ohms.
>
> Why don't you download the demo copy of eznec and play
with it? The demo
> version will do a dipole.
>
> Jim Pennino
>

3875. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: richardharrison@webtv.net
Message-ID: <21550-39D6404B-23@storefull-118.iap.bryant.webtv.net>
Source record: 178769

Tom, W8JI wrote:
"---it acts just like the generator is sourcing through a resistance close to the load resistance with very little of that resistance making heat."

When you have two resistors in series, R1 & R2, the voltage across R2 is (R2 / R1+R2) times the total voltage across R1+R2. This is just the voltage times the fraction of total resistance represented by R2. It`s like the output voltage of a potentiometer or a voltage divider.

The gain formula for a Class A amplifier contains the same sort of fraction because the amplifier tube is a resistance also. It is a variable grid controlled resistor, RP, and is like R1 above. The load resistor, RL, is like R2 above.

The formula for the gain of a Class A amplifier is similar to the output voltage formula above. A tube has a geometry causing an amplification factor. Stage gain is more involved because it is output voltage over input voltage which depends on the voltage appearing across the load resistance and that voltage is reduced by the plate resistance of the tube in the way predicted by the ratio between two resistors as mentioned above.

Stage gain is equal to amplification factor times the load resistance, RL, divided by RL +RP.

The Class C amplifier works differently from the Class A amplifier because it is biased past cut-off and only conducts during less than half the cycle in short high amplitude pulses. The transistions between off and on and between on and off are designed to be quick to avoid power loss caused by simultaneous voltage across the tube and current through the tube, as occurs in the Class A amplifier.

Loss in the Class C amplifying device varies during the cycle from none while the device is switched off, to relatively small while the device is switched on because the switched on voltage drop of the tube or transistor is small even though the current is large.

When constant power output is being delivered by a Class C amplifier, its output is limited to some extent by the tube or transistor because the tube or transistor has a small resistance while conducting. The apparent resistance of the amplifier is higher because the amplifier is switched off most of the time. So, the apparent resistance has two components. One part is the resistance of the amplifying device(s) while switched on, and the other is the off time of the amplifier while no power is being lost.

Both of these effects have no direct connection with energy storage (reactance). An on/off switch stores no energy and the power loss in the plate or collector of an amplifier is instantaneous. So either of these inhibitions to energy flow would be "real". Both are resistances.

Maybe, the on/off switch is a lossless resistance (except for the switch`s imperfection). If this is so, I`ll tell Walt Maxwell and John Fakan that I finally "got it".

Best regards, Richard Harrison, KB5WZI

3876. Re: Copyright problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8r5he7ber1@nnrp1.deja.com>
Source record: 178770

Yuri,
You must of been busy at the time winning the low band contests,
He did it already!
I found out about it from the www mail demon when the it advertised its
confusion as to audry4 or audry5 as the message source, the message was
returned as undeliverable unknown subscriber.
It is no small wonder as the claim message was addressed
TO: Santa.Kloss@NorthPool.org and the claim of pending action was
similar to the December 22 2000 date, I wonder if this is that Green
Grinch character that is planning to steal Christmas or possibly give
us a dose of yellow snow or can it be just another hambug full of
methane.
--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?In article
<20000930025540.29527.00000349@ng-fe1.aol.com>,
k3bu@aol.com (Yuri Blanarovich) wrote:
> >
> >Interesting... I took my morning dump and when
> >I looked in the bowl, there was a fractal shape !!!
> >Is chip going to sue the shit out of me too?
> >
>
> Did you copyright it?
>
> Next thing Chirp will claim copyright and (incoherent) patent
infrigment on
> snowflakes. (allmighty made them look like "his" freaktals).
> Grow up chirping loser!
>
> bada BUm
>

Sent via Deja.com http://www.deja.com/
Before you buy.

3877. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS) filter: frac

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: sideband@mindspring.com
Message-ID: <39D645CC.B05C5646@mindspring.com>
Source record: 178771

Fractenna wrote:

> >Chirp it is because anything that is related to you, people want nothing to
> >do with. You have proven yourself to be a horse's ass time and time again.
> >
> >Barry D.
> >
> >
> >
>
> Barry--
>
> You are being demeaning.
>
> What is the intent of your post, given that it couldn't possibly be true? For
> example: over 450 different folks subscribe yo the reflectors so listed.
>
> Are you callung them "horse's asses"--as you say-- for doing so?
>
> 73
> Chip n1IR

And insulting. You can't forget insulting. I think that is what he was actually after but demeaning is good too.

3878. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <80sB5.228260$c5.4598304@news2.rdc1.on.home.com>
Source record: 178772

> You are being demeaning.
>
> What is the intent of your post, given that it couldn't possibly be true?
For
> example: over 450 different folks subscribe yo the reflectors so listed.
>
> Are you callung them "horse's asses"--as you say-- for doing so?

No just you Chirp. And yes it is true you are a horses ass.

3879. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <stcj6mpuntndf7@corp.supernews.com>
Source record: 178773

Subject line filtering is not going to get the job done. Filter them by
their ADDRESS

CW" <cmagers@sprynet.com> wrote in message
news:8r56av$d53$1@nntp9.atl.mindspring.net...
> Yes, and I have killfiled this bozo and his derivatives but the thread
> keeps changing. It would be very helpful if everyone would decide on a
word
> that could be put in the header to signify that the post is pertaining to
> this fool so that it would be easy to filter out. I have been reading this
> group for about three years. I have seen this twerp, excuse me, twerp PHD,
> go from a relatively minor annoyance to a major PIA. I have also noticed
the
> absence of people who (whom?) in the past I had learned a great deal from.
> They have undoubtedly become tired of wading through the BS to find
anything
> useful, as have I. I now only occasionally red this group where in the
past
> it was the first on the list. It is a shame to see it this way as the
> information gleaned from this group is available nowhere else.
> --
> CW
> KC7NOD
> "Zombie Wolf" <zmbwf@acadia.net> wrote in message
> news:sta3jom4vdkdb1@corp.supernews.com...
> > Have you ever considered learning how to use your filters ?
> >
> > "Larry Benko" <benko@aztek-eng.com> wrote in message
> > news:39CFFF7E.7BFEFB55@aztek-eng.com...
> > > One persistent JERK has caused several people to leave the
> > > group in disgust. This behavior continues and the JERK does
> > > not appear to have a conscience or any self decency. This
> > > really upsets me as I enjoy learning from several of the
> > > experts provided that I can weed through the nonsense.
> > >
> > > Has the group ever considered going to a moderated group with a
> > > reasonable posting policy? I know that many folks don't like
> > > the idea of a moderated group but virtually everyone dislikes
> > > the constant behavior of this one person who can't possibly
> > > have so much free time and a job. This would fix most of the
> > > problems and instantly reduce the number of posts by 1/6th
> > > without loss of any content. Remember that this one bad apple
> > > is responsible for 1/6th of the posts. I don't know who would
> > > want the unenviable job of moderator. Am I way off base here

> > > or do some folks actually enjoy this infantile behavior?
> > >
> > > Larry, W0QE
> >
> >
>
>

3880. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8r5j6ecnu1@nnrp1.deja.com>
Source record: 178774

Hi Ed,
I totally agree with you that all of this fractal bandwidth is a waste.

I wonder if you can see the other side of the coin, did you as him to
stop bombarding the newsgroup with his now blatantly commercial
advertisements using the same origin point but multiple signatures?

It is my personal opinion that it is he who has disrespected every
reader of this news group with his actions why must we hide or
apologies foe such blatant disregard of our rights.
In this situation I personally feel that it is he who owes an apology
to all of the readers of this newsgroup.
I personally feel that all have the right to kill file any name that
they wish but that is just the knee jerk reaction of a coward, may be
it is the coward that needs to be kill filed.

73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector?In article
<20000929071905.19626.00000132@ng-cu1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >From: Gilbert Mouget
>
> >Important notice:
>
> >This poster, Fractenna, has, in my
>
> These repetitive posts being "offered" by several participants here
serve no
> purpose other than to attempt to anger Chip. They do more than
disrespect Chip;
> they disrespect every participant here.
>
> To those that are doing them, could you please stop?
>
> Thanks.
>
> 73,
> Ed Hare, W1RFI
>
>

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3881. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930165148.19686.00000384@ng-cu1.aol.com>
Source record: 178775

```
>
>> You are being demeaning.
>>
>> What is the intent of your post, given that it couldn't possibly be true?
>For
>> example: over 450 different folks subscribe yo the reflectors so listed.
>>
>> Are you callung them "horse's asses"--as you say-- for doing so?
>
>No just you Chirp. And yes it is true you are a horses ass.
>

Could you please tell us why you feel it necessary to attack me, personally, in
this way?

73
Chip N1IR
```

3882. FS: Large prop pitch motors

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r5m5r$p7a$1@bob.news.rcn.net>
Source record: 178776

Yes, two large prop pitch motors, these are the ones with the
6" dia motor. Great for 3 E 75M beams and other really
big stuff. Good condition but pick up only or meet 1/2
way within reason. Also, I can bring them to Hosstraders
next weekend in Rochester NH. $300 for both of them.
73,
Chuck...K1KW

3883. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <stcppub7s9eed1@corp.supernews.com>
Source record: 178777

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D5DBC1.A4D81389@bigfoot.com...
> Nick Kennedy wrote:
> > If we have a black box (voltage source and
> > series impedance assumed), we can measure its impedance by loading it to
a
> > certain current draw and measuring the terminal voltage, then changing
the
> > current drawn and measuring the voltage again. This should allow a
fairly
> > easly calculation of the series impedance in that Thevenin box.
>
> Unfortunately, multiplying that series impedance by the square of the
> current through it often does not yield the true dissipation inside the
> generator. Why not?
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

Yeah, good question Cecil. The posts in response to my comments have been useful in helping me understand the dynamic resistance thing in rf amplifiers (thanks, Bill and others), but I still don't agree that it applies to electrical generators. (Well, I agree that dynamic resistance is a real effect, just not that it brings about a match of source and load.)

I do agree that the voltage adjustment brought about by the feedback loop makes it impossible to calculate the "real" source impedance of the generator by varying the load and measuring the results. But this skewing of apparent internal impedance has nothing to do with matching the machine to its load and everything to do with just simple voltage regulation.

Recall the quality value on power supplies given in percent regulation? Less was better. Back before electronic (feedback) regulation, you generally achieved better regulation just by using huskier components--bigger transformer, lower resistance chokes and so on. (Plus some complex factors in filter design too.) So you got better regulation mainly by lowering the source resistance. This didn't help efficiency a great deal (ohmic losses were reduced, of course) and it certainly didn't match the internal resistance of the power supply to the load resistance.

Now, modern power supplies (and generators) use feedback to control voltage regulation. This makes the source resistance look much smaller. So to summarize (and maybe clarify), I agree that feedback on a generator makes the source impedance look smaller when it is measured dynamically, but I don't agree that this is done to provide any kind of match or to increase efficiency.

And finally, getting back to Cecil's question--
>
> Unfortunately, multiplying that series impedance by the square of the
> current through it often does not yield the true dissipation inside the
> generator. Why not?

It's because that series impedance (meaning the one you measured dynamically with feedback "ON") isn't the actual impedance of the machine. Depending on how much gain you use in the feedback circuit (and whether you use an integral term), the value can be as low as you want it to be, all the way down to zero. Again, this argues against the notion that the feedback circuit is matching the source impedance to the load. The load surely isn't at or near zero ohms.

73--Nick, WA5BDU

3884. Re: Straight Beverage versus bent Fractals

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930185100.10473.00000327@ng-cb1.aol.com>
Source record: 178778

>From: ab2etXXXmy-deja.com

> did you as him to stop bombarding the newsgroup with his now
> blatantly commercial advertisements using the same origin point
> but multiple signatures?

I haven't seen as much of the commercials as I am sure some of you have. I did offer Chip my opinion of the appropriateness of his "This thread is closed" series of posts.

73,
Ed Hare, W1RFI

3885. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930190014.10473.00000329@ng-cb1.aol.com>
Source record: 178779

>From: Richard Clark rwclark@rwclark.seanet.com

>>It can be downloaded from (sorry, this one is on the members-only site):

>Undoubtedly this org fosters the same perception of arrogance and through
>that is suffering a declining interest from the greater population of Hams.

It seems reasonable to me that the members-only pages could offer free
downloads of QST articles to current subscribers/members.

73,
Ed Hare, W1RFI

3886. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <8r5rc2fth1@news.asu.edu>
Source record: 178780

Roy Lewallen (w7el@eznec.com) wrote:
: Programs like EZNEC assume that the ground is homogeneous. If the real
: ground isn't (which I'm quite sure is usually the case), there's
: probably not a single height at which you can place the homogeneous
: ground model which will imitate the real ground in every way. I've also
: questioned whether there are single values of conductivity and
: dielectric constant which will reasonably imitate a stratified ground,
: but don't know the answer.

: Roy Lewallen, W7EL

Roy,

As you assume, there won't in general be a single conductivity and permittivity that will imititate a stratified ground. However, the calculation with a stratified ground, for the case where all the wires are above ground, is not substantially harder than the original Sommerfeld calculation. I think the problem is that it is already difficult for hams to measure ground properties and measuring them accurately as a function of depth would be much harder.

As you probably know, Sommerfeld's method writes the fields of a small current segment in terms of an infinite set of cylindrical waves which, for the region below the current, are propagating outward and downward. (There are also some that are like those from total internal reflection that are exponentially damped rather than oscillating.) The propagation constants outward and downward, give the angle of incidence with the ground, and, breaking the waves into horizontally and vertically polarized components, the problem reduces to calculating the reflection coefficient of these waves from the ground. Once the reflection coefficient is calculated, the process is reversed and you build up the components of the fields from these reflected waves. The final results are the usual Sommerfeld integrals.

The reflection coefficients used by Sommerfeld were first derived by Fresnel around 1820, (that is well before Maxwell or even Faraday) and often are called the Fresnel formulas. However, their derivation from Maxwell's equations leads to equations that are the same form as the transmission line equations that we use to calculate the reflection from the junction of two pieces of coax. That is for air above and ground below, for each incident angle and polarization, you can show that solving Maxwell's equations is identical to solving for the reflection from the junction of two transmission lines, one with propagation constant and characteristic impedance representing the air, and the other representing the ground. The one representing the ground is lossy and taken to have infinite length, so any transmitted wave is

eventually dissipated.

Anyone who does the above calculation, will realize that a stratified ground with say N layers is equivalent to N different types and lengths of transmission connected together. Multiplying a few 2x2 matrices gives the reflection coefficient that a wave incident from the air "transmission line", and plugging this in to the Sommerfeld integrals gives the fields above the stratified ground. The Sommerfeld integrals for both source point and observation point in air will continue to have the nice property that they depend only on the radial distance and the sum of the vertical distances apart, so the 2-dimensional tabulation and interpolation used in NEC-2 will still work fine.

For any single angle of incidence, we can come up with a single conductivity and permittivity that will give the same reflection amplitude and phase, but in general, a single value won't reproduce the stratified case particularly if the stratification matches the downward component of the wave length in the ground so that you get something like a diffraction grating. For most situations the differences won't be so important. For example, for ground with high loss in the first layer, the differences won't matter so much since additional reflections from the lower strata will be damped out before they reach the surface.

73 Kevin w9cf@ptolemy.la.asu.edu

3887. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D65974.7C2C@pacbell.net>
Source record: 178781

klocko@toad.net wrote:
>
> In article <39D54D4C.3680@pacbell.net>,
> dtdonaly@pacbell.net wrote:
> > I thought voltages, in the form of E1 and E2 above were complex
> > numbers, not vectors. You can do more ordinary type arithmetic
> > with complex numbers than you can with vectors (division of one
> > vector into another is not allowed using three dimensional
> > vectors, also, the cross product of two vectors is not commutative.)
> > I was also under the impression that voltage was always a scalar
> > quantity, since E=-delV, where E is a vector and V is a scalar,
> > so I thought it was impossible to take the dot product of V and I.
> > Of course, you can always just multiply them using the rules that
> > apply to complex numbers. Is that what you have in mind? If
> > you guys are going to start talking about fields, vectors and
> > power, you might want to get a book on electromagnetics and read
> > through the part on the *divergence* of the Poynting Vector. I
> > believe you'll find it very illuminating.
>
> Hi Tom,
> Yes, they're complex numbers, but they can be represented as vectors.
> The usual vector operations like addition and dot product apply. For
> instance, to add two phasors in cartesian form (x+jy), add their
> separate components. The cosine of the angle between V and I is the
> power factor. And so on. I hope this won't diverge into
> electromagnetics. 73,
> Bill N3WK
>
> Sent via Deja.com http://www.deja.com/
> Before you buy.

I hope it won't, too, since I can't type all the little symbols
it takes to do electromagnetics justice. I'm glad to learn that
phasors and vectors can be treated the same way, it makes life
much easier. Now, how do I divide one three-dimensional vector
into another? This must be something new, because all my books
on the subject say it can't be done and my HP calculator sneers
at me when I try it, while dividing one phasor into another is
a cinch. Secondly, how can I take the cross product of (a + jb)
and (c + jd)? The books don't define this, either, and, needless
to say, the old HP48GX won't do it. If you've figured out how to
do these things you're a greater genius than Josiah Willard Gibbs,
and perhaps, who knows, even Hermann Grassman the eminent 19th
century mathematician who thought much of this stuff up.

73

Tom Donaly KA6RUH

3888. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: dennis@wawa.juniper.net
Message-ID: <8r5s8r$1cs2$1@heap.juniper.net>
Source record: 178782

Ed Hare, W1RFI <w1rfi@arrl.net> wrote:
>CAM <cam2338@bigfoot.com> wrote :
>
>> "dissipation - loss of electric energy as heat" It's not always
>> undesirable. It's how I heat my house in the winter.
>
>Mine is heated by chemical conversion -- wood into BTUs.
>
>I supplement the heat in my bathroom with a small heater -- the only device
>I know of that is 100% efficient. :-)
>
>73,
>Ed Hare, W1RFI

Perfect component efficiency, but maybe not so good system efficiency.
Since you are on the east coast, the electricity you used was probably
generated with heat (from burning coal or oil, or maybe fissioning uranium).
The second law of thermodynamics limits the efficiency of the process of
turning heat into electricity to probably 60-something percent, with the
remaining heat being wasted out the cooling tower at the generating
station. So only 60% of the heat required to make the energy you used
ended up in your bathroom.

Dennis Ferguson

3889. Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: matjake@aol.com
Message-ID: <20000930194621.10678.00000373@ng-cb1.aol.com>
Source record: 178783

Hi

I have been reading this newsgroup for a year and I was just wondering if anyone had any experience with helical antennas on HF. I like to experiment and was considering building one for ten or 15 meters. Does anyone have any hints or know of anyone who has been succesful with idea?

Thanks and 73,
Matt

3890. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000930194717.19698.00000359@ng-cu1.aol.com>
Source record: 178784

>Could you please tell us why you feel it necessary to attack me, personally, in this way?<

IMHO, it is not necessary to attack Chip in this way. For one thing, it is always unwise to tell anyone anything they already know. Instead, preserve the bile. Gary's right--too many people spending too much time pounding thin air with a rubber mallet. Very Don Quixote, and you might hit your kneecap.

73

Rick K1BQT

3891. Re: Helical antenna for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Cal Kutemeier <ckuter@ix.netcom.com>
Message-ID: <8r61vomjs1@nntp9.atl.mindspring.net>
Source record: 178785

Check out the 8/96 issue of 73 Amateur Radio Today magazine. Page 38 has an article of using a slinky and PVC mast for a helical antenna. If you do not have access, send me a SASE and I will copy it for you. I'm good in QRZ.

Cal
KG9PQ

MatJake <matjake@aol.com> wrote in message
news:20000930194621.10678.00000373@ng-cb1.aol.com...
> Hi
>
> I have been reading this newsgroup for a year and I was just wondering if
> anyone had any experience with helical antennas on HF. I like to
experiment and
> was considering building one for ten or 15 meters. Does anyone have any
hints
> or know of anyone who has been succesful with idea?
>
> Thanks and 73,
> Matt

3892. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D692ED.37EE5C5E@bigfoot.com>
Source record: 178786

VE9SRB wrote:
> What's
> happening in Cecil's example is that the transmitter does not deliver 100
> watts of power to the 300 ohm line AND the re-reflected power is not 100
> watts. I'll discuss this in another post.

Therefore, our power/SWR meters are all wrong? There's absolutely no difference in the signals in the coax in the following two examples. The power in the coax equals Pg. The voltage in the coax is Vg. The current in the coax is Ig. The phase angle between the voltage and current in the coax is zero. The ratio of Vg to Ig is 50 ohms. There is no measurable difference and there are no reflections on the coax after steady state has been reached. All reflections on the coax have been neutralized by the interference pattern at the Z0-match and the generator sees 51.5 ohms.

100w--->---51.5 ohm coax--->---x--51.5 ohm load

100w--->---51.5 ohm coax--->---x-----1/2WL 300 ohm line----51.5 ohm load
--
http://www.mindspring.com/~w6rca

3893. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D694F4.FA2FF65B@bigfoot.com>
Source record: 178787

VE9SRB wrote:
> Tom:
> One important point I forgot to mention.
>
> There is a formula for adding two forward traveling powers in a transmission
> line:
>
> Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) cos(theta)

Hey, a perpetual motion machine. Use two phase-locked IC-706s to
each put 100 watts into a transmission line with the angle between V1
and V2 equal to zero and get 400 watts out - no SGC-500 required.
Better get a patent on that thing, Steve.
--
http://www.mindspring.com/~w6rca

3894. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D698FA.D4C1CC3F@bigfoot.com>
Source record: 178788

VE9SRB wrote:
> If you can give me some time (its a busy day), I would like to provide a
> discussion of what's happening at the ZO match and how the driving an
> re-reflected waves combine to be 200 watts.

Don't know exactly how they combine, Steve, but the boundary conditions
are 100% known and the results are 100% known. With a 50 ohm power meter
and two 300 ohm power meters, you can read the generated power = 100w,
forward power = 200w, and reflected power = 100w. The Z0-match doesn't
get hot so we know that the conservation of energy principle applies.
Therefore the generated energy combines with the reflected energy to
yield the forward energy.

Pg >>>> P+ >>>>
100w-->--51.5 ohm coax---x---1/2WL 300 ohm line---51.5 ohm load
<<<< P-

Pg is measured at 100w. P+ is measured at 200w. P- is measured at 100w.
Vg/Ig = 51.5, V+/I+ = 300, V-/I- = 300, Vg*Ig=100, V+*I+=200, V-*I-=100
That's six equations and six unknowns, Steve. A high school algebra
student can solve for the results.
--
http://www.mindspring.com/~w6rca

3895. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <std7uh9r61bq3c@corp.supernews.com>
Source record: 178789

> The second law of thermodynamics limits the efficiency of the process of
> turning heat into electricity to probably 60-something percent, with the
> remaining heat being wasted out the cooling tower at the generating
> station. So only 60% of the heat required to make the energy you used
> ended up in your bathroom.
>
> Dennis Ferguson

Hello Dennis-

It's even worse than that. Actually, the efficiency of a modern steam turbine electric power plant is about 30%. And they do push the theoretical limit pretty hard.

BTW--Ed didn't say the bathroom heater is electric. If it's gas, he may have that 100% "system" efficiency.

73,

Nick, WA5BDU

3896. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D69E52.502398B5@bigfoot.com>
Source record: 178790

VE9SRB wrote:
> If you have two forward traveling waves in the transmission line where both
> have voltages that are in-phase, then the current must be in phase as well.
> If the current waves of each were 180 degrees out of phase, then the
> voltages would be 180 degrees out of phase as well.

When transfering power from a 50 ohm line to a 300 ohm line, the voltage must
increase and the current MUST DECREASE in order to honor the conservation of
energy principle. Therefore, the currents have to be out of phase to add up
to a lesser value. So your statement is prima facie false.
--
http://www.mindspring.com/~w6rca

3897. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D69F6C.A0444F76@bigfoot.com>
Source record: 178791

Richard Clark wrote:
> What is this
> I * I * Z
> you speak of?

With a Thevenin equivalent circuit, it would be I*I*Rg
which is often less than I*I*RL indicating that if Rg
equals RL, part of RG is non-dissipative.
--
http://www.mindspring.com/~w6rca

3898. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D6A39A.D9E4A2B9@bigfoot.com>
Source record: 178792

Richard Clark wrote:
> Your allowing that
> >a "virtual short" does not stand up under a rigorous
> >mathematical treatment
> is in marked contrast to Walt's rigorous mathematical treatment.

I haven't read the CQ articles but I know the phasors don't act at a virtual short exactly the way they act at a dead short. But we know all about the steady state signals so we can make the "theory" fit the known circumstances. Maybe we can say it is virtually a short. :-) Maybe that's what Walt meant in the first place.
--
http://www.mindspring.com/~w6rca

3899. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D6A4C2.DFE61F5E@bigfoot.com>
Source record: 178793

John Burrell wrote:
> Are you thinking of .co.uk perhaps?

Yep. (Is "yep" a good word in England :-) How about "yup".

> I was just hoping that someone had perhaps
> followed this path before and arrived at a 'best solution'.

Trouble is, there are almost as many "best solutions" as
there are hams.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3900. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: jeffreys@cyburban.com
Message-ID: <39d6a988$0$1369$45beb828@newscene.com>
Source record: 178794

It was meant to be unrelated.

I am just an observer here. There are a lot of people claiming
to not want to hear about fractal antennas (I am not one of them).

This is how newsgroups split. I think it would be healthy. Its why there are
over 40K now. Its always best to have any group of people committed to a topic
to split off when critical mass hits.

--jeffrey steinberg, kc2guc, scarsdale, ny

In article <20000930105157.17825.00000033@ng-mg1.aol.com>, fractenna@aol.com
says...
>
>>
>>How about just creating rec.radio.amateur.antenna.fractal
>>for those who want to discuss this topic and leave rec.radio.amateur.antenna
>>for "conventional" antennas?
>>
>>In article <8r3jdh$k2c$1@bob.news.rcn.net>, coneal@ultranet.com says...
>>>
>>>When he looks in the mirror, he sees
>>>the most beautiful person he has ever seen....
>>>that's the problem...
>
>Hi Jeff--
>
>Mr. Lewallen made a public and globally accessed statement stating that the
>(unauthorized) file was available on the EZNEC web site. If he had made such a
>post on ' alt.moxie' then the public notification of unauthorized use would
>have been posted there.
>
>This has nothing to do with a fractal antenna or anything else that you allude
>to. It has to do with intellectual property, ownership, and infringement.
>
>Your suggestion is a good one but unrelated.
>
>73
>Chip n1IR

3901. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D6AAAB.C682539D@bigfoot.com>
Source record: 178795

VE9SRB wrote:
> Cecil: I started to check the example. I think the input impedance to the
> 1/4 WL line is 1748 ohms (approx) not 51.5 ohms. I think the section of 300
> ohm line should be 1/2 WL long.

Yep, it was a typo, sorry. If it were 1/4WL long, the load should be 1748 ohms.
--
http://www.mindspring.com/~w6rca

3902. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D6AB84.B83927C9@bigfoot.com>
Source record: 178796

Nick Kennedy wrote:
> ... the value can be as low as you want it to be, all the way
> down to zero.

Say Nick, would you send me one of those amps with a source impedance
of zero? That would be a cool amp in more ways than one.
--
http://www.mindspring.com/~w6rca

3903. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D5DC7A.95F1310C@bigfoot.com>
Source record: 178869

"William E. Sabin" wrote:
> This verifies that plate resistance is a lossless "resistance" (dV/dI).

Effected, to a certain degree, by the load?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3904. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930084151.06208.00000207@ng-fy1.aol.com>
Source record: 178870

>g4fgq.regp@btinternet.com

>Dear Roy, try not to be so nit picking. Or have I misjudged
>you ? ;o)

I have personally found Roy's nits to be very valuable to me. A nit can often be the difference between a complete and accurate understanding of something and a near miss.

I am sure Roy meant no personal disrespect.

73,
Ed Hare, W1RFI

3905. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930084712.06208.00000208@ng-fy1.aol.com>
Source record: 178871

>From: k1bqt@aol.com (Rick Littlefield)

>> Does the fact that ARRL still makes the articles available change your mind
>about the conspiracy theory, Dick?<

>It's not called a conspiracy, it's called editorial blacklisting. Past QST
>articles can't be "archived out" and made to vanish--that's an invalid
>argument.

It becomes a valid argument when the ARRL intentionally puts the articles
available for public download from one of its pages. In what way is that
"blacklisting?"

>I, for one, would like to purchase a new a copy of "Reflections" because I
>loaned mine to someone a while ago and never got it back!

I have heard that it is in negotiation with a publisher now (World Radio?). If
it is published, I will add linkage to the ARRL's SWR page.

I will see if I have an extra archival copy and send it to you if I do.

73,
Ed Hare, W1RFI

3906. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D5DF6B.6FEA35B5@bigfoot.com>
Source record: 178872

Donaly wrote:
> It may, indeed, be a conceptual error, such as treating hydraulic
> fluid as a liquid when everyone knows it's just a collection of
> molecules. However, you may want to read the text, Field
> and Wave Electromagnetics, by David K. Cheng, where he reduces all
> the small reflections to a closed form expression using the
> binomial theorem -although he doesn't explicitly identify the
> binomial theorem as such- which gives expressions for voltage and
> current -sinusoidal- at any point on a transmission line. It probably
> won't convince you Walt is right, but it should give you food
> for thought.

Saying Walt was "wrong" is like saying Newton was "wrong". What Walt says works in the same way that what Newton said works. Even if the concept of a "virtual short" does not stand up under a rigorous mathematical treatment, it is still a useful concept. A novice is much more likely to understand the concept of steady-state re-reflected power than to understand the infinite series of interference patterns that underlies the concept.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3907. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930085510.28448.00001288@ng-fc1.aol.com>
Source record: 178873

>>From: k1bqt@aol.com (Rick Littlefield)
>
>>> Does the fact that ARRL still makes the articles available change your
>mind
>>about the conspiracy theory, Dick?<
>
>>It's not called a conspiracy, it's called editorial blacklisting. Past QST
>>articles can't be "archived out" and made to vanish--that's an invalid
>>argument.
>
>It becomes a valid argument when the ARRL intentionally puts the articles
>available for public download from one of its pages. In what way is that
>"blacklisting?"
>
>>I, for one, would like to purchase a new a copy of "Reflections" because I
>>loaned mine to someone a while ago and never got it back!
>
>I have heard that it is in negotiation with a publisher now (World Radio?).
>If
>it is published, I will add linkage to the ARRL's SWR page.
>
>I will see if I have an extra archival copy and send it to you if I do.
>
>73,
>Ed Hare, W1RFI
>

ARRL Editorial came be blamed for many things. 'Blackisting' of Harvard Ph.D.
Walt Maxwell is not one of them.

I have always found Dr. Maxwell's materials on transmission lines and baluns
extremely valuable and accurate.

I have a copy of 'Reflections' and am glad the ARRL published the book.

I am not so naive as to assume a business decision--right or wrong--in any way
reflected (so to speak) on the author.

Read Walt's stuff at any opportunity--it speaks with the truth of things.

73
Chip n1IR

3908. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000930090801.22381.00000226@ng-da1.aol.com>
Source record: 178874

Hi Ed--

If you have an extra copy, I would be extremely glad to do whatever needs to be done to obtain it (even buy the lobsters)!

73

Rick K1BQT

3909. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r4qksakl1@plutonium.btinternet.com>
Source record: 178875

Ed sed -
> I am sure Roy meant no personal disrespect.
============================

So am I.

Incidentally, at this juncture, I am usually invited to a
tea party in Boston, presumably the one in Massachusetts.

Reg, G4FGQ

3910. Re: Question: YAGI vs Log Periodic. What's better?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930100655.28148.00000238@ng-mg1.aol.com>
Source record: 178876

>
>Hi everyone!
>
>I want to make my own antenna (i surely can buy one in radio shack but i
>want to make something with my hands). That antenna have to capture the
>following freqs:
>
>Channel Freq
>02 55.25 --> important
>06 83.25 --> important
>10 193.25 --> important
>12 205.25 --> important
>17 489.25
>29 561.25
>33 585.25
>35 597.25 --> important
>44 651.25 --> important
>46 663.25 --> important
>57 729.25
>62 759.25
>
>What kind of antenna i have to use? (i think that i have to use Yagi AND Log
>Periodic, am i right)?
>Some URLs with designs?
>Maybe someone have constructed something similar?
>Please HELP
>
>TheImperia
>theimperia@yahoo.com
>

Hi Alex--

Log periodic arrays work well when you need basically the same performance over a wide frequency range, such as for your TV. They have specific geometric attributes that makes this possible.

Although LP's may superficially LOOK like yagis, they are not parasitic and are relatively narrow in bandwidth.

So you need an LP.

If you do a search for TV log peridoic I am sure you will find adequate instructions on building your own, although truthfully they are cheaper to buy off the shelf--at least in the States.

73
Chip n1IR

3911. Re: Part 15 interference on 2.4 GHz? Re: Best antenna for 2.4 Ghz???

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <39D5F718.727A672@wb6hqk.ampr.org>
Source record: 178877

Hi Hasan,

hasan schiers wrote:
>
> Hi Ed et al,
>
> Well, I have the 2.4 gig wireless internet stuff going. I have a couple of
> observations and an antenna question or two:
>
> The system is an Orinico card with a flat panel kind of antenna which I'll
> discuss later. The antenna is fed with 50' of LMR 400. This is the PART 15
> unlicensed equipment that has been discussed on this NG recently.

[snip]

> Throughput: I am seeing anything from 100 K bps to 400 K bps...the network
> is not exactly stable at this point. The RF side is stable, but the provider
> seems to be having "shakedown problems". My last 28 mb dowload averaged 170
> Kbps.

Does the ISP have a web or ftp server you can connect to? It would be
nice to verify the sustained RF rate was in spec.

> Now...on to the antenna questions: (the antenna is a passive device, no
> preamps or down converters)
>
> 1. The existing antenna is a flat panel that is about 5 inches wide, 10
> inches tall and 1/2 inch thick. It is mounted Horizontally. That leads me to
> think it is vertically polarized..maybe an array of dipoles in front of a
> reflector? Its stated gain is 15 dBi. (By horizontal I mean the 10 inch
> length is parallel to the ground), Is it vertically polarized?

It's really hard to say but I would expect it to be vertically polarized
with most of the gain coming from the narrow horizontal beamwidth.

> 2. I have found a replacement antenna designed for exactly the same kind of
> service that is 39 inches wide...it is a screened reflector dish with stated
> gain of 24 dBi. It's 3 dB beamwidth is stated at 8 degrees. Is there any
> reason to assume that simply replacing one antenna with the other will not
> produce an improved S/N of at least 9 dB? (It might even be better due to
> the high directivity of the larger antenna)

At first blush, you indeed would expect the signal to increase by a
minimum of 9 dB and for the multipath, on the average, to be decreased
as well. I doubt active noise sources are a problem but that could
change in a couple of years. Should be a win-win as long as you can
maintain the antenna pointed correctly.

One minor point in favor of the flat plate antenna is that it probably maintains it's low sidelobes for horizontal polarization better than the dish. Look carefully at the pattern for a cross polarized parabolic reflector. At large angles off boresight, the response to the 'wrong' polarization is considerably larger than you might expect. This can have the effect of reduced multipath rejection and is in fact can be a significant weakness in certain military systems.

I seriously doubt the cross polarization response will significantly negate any of the improvements expected but is something to consider.

> The antenna can be seen at :
> http://www.hyperlink.cc/antenna2400.htm

The link doesn't seem to exist?

>
> 3. What is the attenuation per 100' of LMR 400 coax at 2.4 gig?

Don't know but you should be able to find it on the web easily enough.

> My current noise floor is about -95 dBm and my signal level is about -82
> dBm.
> With the new antenna, I should expect a signal level of -73 dBm...which
> would be quite an improvement and the noise floor might drop too?

It might, but my expectation is that at the end of the feedline, your noise level will be determined by receiver noise figure and not external interference. What is the system bandwidth? Thermal noise is -114 dBm in a 1 MHz bandwidth.

> Why am I considering this? Well....the software (as well as the installer)
> says I have a "marginal" signal level. I have about 13 dB S/N and they would
> like at least 16 dB and preferably 20 dB.

Sounds reasonable. 13 dB is right on the knee of the bit error rate (BER) vs SNR for FSK or PSK systems operating without (or before) forward error correction (FEC). 17 dB is kind of a nominal number and another couple of dB for fading (on an assumed _non_ fading channel) and correlated multipath is a good idea.

> While the systems seems to work
> well (aside from them not having their internet act together yet), I would
> like to see the multi-color bar graph S-Meter (and NO IT AIN'T 6 dB per S
> unit!) go from high yellow to "in the green", especially considering things
> that might happen to degrade the path. (It's 3.6 miles, but through some
> trees at various places along the path)

Agreed.

> If I have analyzed this correctly, I should get a S/N of 22 dB with the new
> antenna, which would be exactly what I was looking for. Am I assuming too
> much or missing something obvious?

Sounds good to me.

> I expect to see some 3 to 5 dB improvement in the next month if I do nothing
> at all, due to the leaves coming off the trees....but that is not something
> I can rely on.

Might be interesting to see.

bart
wb6hqk

3912. QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <20000930104854.22597.00000353@ng-fa1.aol.com>
Source record: 178878

Does anybody know of the QST article, year and month, where they compared the losses and matching ranges of various commercial antenna tuners? Thanks.

73s,

Evan

3913. Re: Copyright problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D5E8D9.357CC8B8@dvol.com>
Source record: 178879

Yuri Blanarovich wrote:

> >
> >Interesting... I took my morning dump and when
> >I looked in the bowl, there was a fractal shape !!!
> >Is chip going to sue the shit out of me too?
> >
>
> Did you copyright it?
>
> Next thing Chirp will claim copyright and (incoherent) patent infrigment on
> snowflakes. (allmighty made them look like "his" freaktals).
> Grow up chirping loser!
>
> bada BUm

>
He sure has twisted the mathematics of Chaos to mindless new heights . . I have
half a notion to take him on in the 10m bash with a tweaked Radio Slack CB
ground plane . . .
>
w3rv

3914. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930105157.17825.00000033@ng-mg1.aol.com>
Source record: 178880

>
>How about just creating rec.radio.amateur.antenna.fractal
>for those who want to discuss this topic and leave rec.radio.amateur.antenna
>for "conventional" antennas?
>
>In article <8r3jdh$k2c$1@bob.news.rcn.net>, coneal@ultranet.com says...
>>
>>When he looks in the mirror, he sees
>>the most beautiful person he has ever seen....
>>that's the problem...

Hi Jeff--

Mr. Lewallen made a public and globally accessed statement stating that the (unauthorized) file was available on the EZNEC web site. If he had made such a post on ' alt.moxie' then the public notification of unauthorized use would have been posted there.

This has nothing to do with a fractal antenna or anything else that you allude to. It has to do with intellectual property, ownership, and infringement.

Your suggestion is a good one but unrelated.

73
Chip n1IR

3915. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <sbnB5.925$0n.75708@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178881

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39d49b51.15415278@news.akorn.net...
> On Fri, 29 Sep 2000 12:50:00 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> >100 watts + 100 watts does not "add" to become 200 watts. This would
only
> >be true if the voltages associated with each power were 90 degrees out of
> >phase. If the voltages were in phase, 100 watts plus 100 watts would add
to
> >become 400 watts
> >The voltages in a transmission line are complex and add
> >as vectors. Vtotal = V1 + V2 (adding as vectors). Ptotal = |Vtotal|^2 /
Z.
> >Assuming Z is a pure resistance.
>
> It sounds like you are saying the voltage doubles at a reflection, and
> current doubles at the same time causing power to increase by four.
>
> Can you explain in detail how that would happen?
>
> 73 Tom

Hi Tom:

Thank you for asking for an explanation. I appreciate it very much. I will address your comments and hopefully those of Cecil and others as well.

First, Cecil is correct that power is a scalar quantity but it is important to understand that total power is determined from the addition of complex voltage phasors and complex current phasors, not from the direct addition of the scalar quantity of power.

In all transmission line systems (assuming that ZO is purely resistive) the forward traveling power in the transmission can be found simply as follows:

Pforward = |Vforward| * |Iforward|

OR

Pforward = |Vforward|^2 / ZO

OR

Pforward = |Iforward|^2 * ZO

Let's look at it from the perspective of voltage. Let's assume that the transmitter delivers a forward voltage to the 300 ohm line having a magnitude equal to 173.2 volts. This equates to a forward traveling power of 100 watts. Here's the first problem, knowing only the power, we have no idea as to the what the phase of the voltage is. It could be 0 degrees, 90 degrees, 180 degrees, etc.

Now, lets assume that the voltage re-reflection at the match point has a magnitude of 173.2 volts as well. This equates to a re-reflected power of 100 watts. Again, we have no idea as to what the phase of the voltage is.

Now we need to determine the total forward traveling power in the transmission line. We know that the total forward traveling wave is equal to the sum of the transmitter wave plus the re-reflected wave. Looking at power, most people immediately assume that 100 watts plus 100 watts is equal to 200 watts.

The addition of the transmitter wave and the re-reflected wave occurs as follows:

Vtotal = Vtransmitter + Vre-reflected AND Itotal = Itransmitter + Ire-reflected.

The important point is that all we know from the system power are the magnitudes of the voltage not the phase. As a result, we cannot correctly add 173.2 volts + 173.2 volts as vectors. I'll use the "@" symbol to represent phase.

IE. 173.2 @ 0 + 173.2 @ 0 = 346.4 @ 0 volts for which the power is equal to 400 watts.

173.2 @ 0 + 173.2 @ 90 = 244.94 @ 45 volts for which the power is equal to 200 watts

173.2 @ 0 + 173.2 @ 180 = 0 volts for which the power is equal to 0 watts.

Based on this fact, we see that 100 watts in phase with 100 watts cannot equal 200 watts. In the case of the example presented by Cecil, we know that we have 200 watts of forward power. So, if the total forward power is 200 watts, what's my explanation of what's really happening?? What's happening in Cecil's example is that the transmitter does not deliver 100 watts of power to the 300 ohm line AND the re-reflected power is not 100 watts. I'll discuss this in another post.

As for the conservation of energy, it only requires one thing: that the total power dissipated in the transmission line system be equal to the total power delivered to the system by the transmitter.

When examining the wave reflections, we should be able to maintain the correct relationships between adding voltage and determining total power.

73,
Steve

3916. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D5EC5B.193A0A12@dvol.com>
Source record: 178882

Wayne Jones wrote:

>
> I understand that with an inverted v, the legs have to be slightly longer
> than a horizontal dipole. Is it possible to come up with a good guess as to
> what the length should be?
>
> Also, will the impedance be around 50 ohms at the center? I understand that
> the impedance varies with the angle of the V.
>
> Tnx
> Wayne Jones
> ve3gqx

>
The only parameters which really matter are height and the vee angle. You'd be
better off if the angle was 120 degrees or more than with 90 degrees. Use a 1:1
choke balun at the feedpoint. With the short coax run at 14Mhz tweaking a few
inches here and there to minimize the swr is a waste of time as far as losses
and effectiveness are concerned. Any swr below 2:1 will work just ducky. If you
just gotta have a flat swr do it with a tuner. Which you should do anyway in
order to reduce the amount of out-of-band RF that gets fed into your receiver
front end.
>
w3rv

3917. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ginB5.934$0n.74529@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178883

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D4A748.E290D543@bigfoot.com...
> VE9SRB wrote:
>
> Nope, you forgot current. If the voltages are in phase, the currents will
> be out of phase, keeping the 100+100=200 math consistentent.

In any transmission line system, the ratio of forward voltage and forward current always obeys the following law:

Vforward / Iforward = ZO

If you have two forward traveling waves in the transmission line where both have voltages that are in-phase, then the current must be in phase as well. If the current waves of each were 180 degrees out of phase, then the voltages would be 180 degrees out of phase as well.

The total forward voltage in a transmission line = Vforward1 + Vforward2

The total forward current in a transmission line = Iforward1 + Iforward2

Anyway, if the currents were out of phase and traveling in the same direction, they would cancel one another and the total forward current would be zero.

Steve

> --
> http://www.mindspring.com/~w6rca

3918. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: 2w8ji@contesting.com
Message-ID: <39d5ffc7.28253349@news.akorn.net>
Source record: 178884

On Fri, 29 Sep 2000 22:32:29 -0500, CAM <cam2338@bigfoot.com> wrote:

>Tom W8JI wrote:
>> I've never noticed that you get out of line or make childish remarks.
>
>For Gary, getting out of line and acting childish means catching
>him in a mistake. Some I recall are:

I'm sure we all make mistakes from time-to-time. I wouldn't loose any
sleep over it if it were you catching me, or gloat over it if it were
me catching you.

There's no reason for adults to act (what can best be described as)
chippish when dealing with techinal issues.

73 Tom

3919. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <2pnB5.941$0n.74952@bgtnsc05-news.ops.worldnet.att.net>
Source record: 178885

"CAM" <cam2338@bigfoot.com> wrote in message
news:39D5DAA9.53A31979@bigfoot.com...
> Donaly wrote:
> > I thought voltages, in the form of E1 and E2 above were complex
> > numbers, not vectors.
>
> Yes, sometimes called phasors with a magnitude and an angle. However,
> at a Z0-match point all phasors are either in phase or 180 degrees
> out of phase. Thus, ordinary arithmetic works just fine *at a Z0-match
> point*. Phasors with a zero degree angle get a plus sign and phasors
> with a 180 degree angle get a minus sign.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

If you can give me some time (its a busy day), I would like to provide a
discussion of what's happening at the ZO match and how the driving an
re-reflected waves combine to be 200 watts.

Later ....

STeve

3920. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930111652.10562.00000291@ng-cb1.aol.com>
Source record: 178886

>From: k9sqg@aol.com (K9SQG)

>Does anybody know of the QST article, year and month, where they compared the
>losses and matching ranges of various commercial antenna tuners? Thanks.

March 1997 was one of them, comparing the high-end tuners.

It can be downloaded from (sorry, this one is on the members-only site):

http://www.arrl.org/members-only/prodrev/pdf/pr9703.pdf

I will add that Tom Rauch and I have been having some discussions about the accuracy of the method used to measure the losses. It is yet tbd, but there is a possibility that the measurement uncertainty may be high toward the high end of the range.

There are a few unreviewed tuners, so QST will probably do another. For that Review, the ARRL Lab will use three different test methods (the original, plus two others) and evaluate the results. The most accurate of them will be published. If this evaluation shows any significant deviation from the results using the original test method, I am going to ask the editor if I can do a sidebar, explaining the differences. The original method used was developed from a testing technique developed by Witt and published in the April and May 1995 QST. The articles are available at:

http://www.arrl.org/tis/info/tuner.html

As always, discussion and inpt are welcome. :-)

73, Ed Hare, W1RFI

3921. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: w1rfi@aol.com
Message-ID: <20000930112028.10562.00000292@ng-cb1.aol.com>
Source record: 178887

>From: k1bqt@aol.com (Rick Littlefield)

>If you have an extra copy, I would be extremely glad to do whatever needs to
>be
>done to obtain it (even buy the lobsters)!

Maybe I will ask you to donate a couple of your power meters to the Lab, or let us borrow one of your R&D transmitters to test something for an article. :-) I don't know for certain if I have one, but I will check.

73,
Ed Hare, W1RFI

3922. Re: Townhouse Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <39D5EEDD.E9724867@dvol.com>
Source record: 178888

Reid Simmons wrote:

> The house we now own has similar CC&Rs and I have a wire antenna farm plus a six
> meter beam on our property and I can run up to 1KW output. None of the
> neighbors even has a clue!
>
> Like the Nike slogan says: "Just Do It".
>
> Reid, K7YX

>
My kinda guy . . Amen, brother! Scroo 'em all, they got no clue.
>
w3rv

3923. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <UGnB5.12270$tl2.874415@bgtnsc07-news.ops.worldnet.att.net>
Source record: 178889

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39d49b51.15415278@news.akorn.net...
> On Fri, 29 Sep 2000 12:50:00 GMT, "VE9SRB" <srbest@worldnet.att.net>
> wrote:
>
> >100 watts + 100 watts does not "add" to become 200 watts. This would
only
> >be true if the voltages associated with each power were 90 degrees out of
> >phase. If the voltages were in phase, 100 watts plus 100 watts would add
to
> >become 400 watts
> >The voltages in a transmission line are complex and add
> >as vectors. Vtotal = V1 + V2 (adding as vectors). Ptotal = |Vtotal|^2 /
Z.
> >Assuming Z is a pure resistance.
>
> It sounds like you are saying the voltage doubles at a reflection, and
> current doubles at the same time causing power to increase by four.
>
> Can you explain in detail how that would happen?
>
> 73 Tom

Tom:

One important point I forgot to mention.

There is a formula for adding two forward traveling powers in a transmission
line:

Ptotal = P1 + P2 + 2 sqrt(P1) sqrt(P2) cos(theta)

where theta is the phase angle difference between the voltages V2 and V1.

Steve

3924. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39D5F989.A18AEB59@berkshire.net>
Source record: 178890

ok, where are the legal beagles... chip's own words seem to ring a bell that may point out why his copyright infringement claims won't stand up.

Fractenna wrote:
>
> The file was transcribed by Steven Best and thus is a derivative work of the
> aforementioned copyright material, in which the copyrighted material is at
> least substantially recognizable in Best's rendition.
>

> Those who have downloaded this file are so advised that this is copyrighted
> material with an intended controlled distribution; it is not in the public
> domain; its web-based distribution does not constitute 'fair use'.
>

'fair use' and 'derivative work'. use of published material is normally legal as long as it is properly attributed (see the "mi2 loop.txt" file in the same directory as the eznec model), and is not a substantial part of the original work. didn't i remember that roy transcribed this from a published article? as such it was surely just a single figure or two in that article and as such would probably be only a small part of the original work. and if the original wires table wasn't published at all as it sounds then there may even be doubt that it could have been copied in the first place. and being 'recognizable' doesn't necessarily prove infringement. the use of the main melody of very recognizable songs is legal for parodies with new lyrics. speaches and recognizable writings are frequently, and legally, modified and published as parodies. copying and quoting technical work of others then improving or adding to it is a standard practice and does not require prior permission unless using a substantial part of the orginal work.

look at this from a more generic point of view with this situation:
1. person-a publishes an article with pictures, graphs, and word descriptions of a design for item-x. they make certain claims that item-x works a particular way. they do not publish their design files or specific parts of them that would let someone else duplicate their work.
2. person-b reads the article and says 'i can do better'. taking the description of item-x and looking at the pictures they reverse engineer item-x and create their own model of how it works in a different (or even the same) modelling program. from that derived model they learn how item-x performs and find that it has some shortcomings and can be done just as well or better a slightly different way.

first, if this were scientific work i would expect person-b to publish their work citing person-a's work and showing how it was wrong or how it could be improved. this is done all the time in technical journals.

second, if this were a comercial product i would expect person-b to file a patent application with specific improvements on the original design... and if granted and if person-a wanted to use those changes person-a would have to buy them from person-b.

so fire up that patent process roy, you may have something here if fracky is so keen to squash it!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

3925. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39D5F9AF.DD271A7C@berkshire.net>
Source record: 178891

ok, where are the legal beagles... chip's own words seem to ring a bell that may point out why his copyright infringement claims won't stand up.

Fractenna wrote:
>
> The file was transcribed by Steven Best and thus is a derivative work of the
> aforementioned copyright material, in which the copyrighted material is at
> least substantially recognizable in Best's rendition.
>

> Those who have downloaded this file are so advised that this is copyrighted
> material with an intended controlled distribution; it is not in the public
> domain; its web-based distribution does not constitute 'fair use'.
>

'fair use' and 'derivative work'. use of published material is normally legal as long as it is properly attributed (see the "mi2 loop.txt" file in the same directory as the eznec model), and is not a substantial part of the original work. didn't i remember that roy transcribed this from a published article? as such it was surely just a single figure or two in that article and as such would probably be only a small part of the original work. and if the original wires table wasn't published at all as it sounds then there may even be doubt that it could have been copied in the first place. and being 'recognizable' doesn't necessarily prove infringement. the use of the main melody of very recognizable songs is legal for parodies with new lyrics. speaches and recognizable writings are frequently, and legally, modified and published as parodies. copying and quoting technical work of others then improving or adding to it is a standard practice and does not require prior permission unless using a substantial part of the orginal work.

look at this from a more generic point of view with this situation:
1. person-a publishes an article with pictures, graphs, and word descriptions of a design for item-x. they make certain claims that item-x works a particular way. they do not publish their design files or specific parts of them that would let someone else duplicate their work.
2. person-b reads the article and says 'i can do better'. taking the description of item-x and looking at the pictures they reverse engineer item-x and create their own model of how it works in a different (or even the same) modelling program. from that derived model they learn how item-x performs and find that it has some shortcomings and can be done just as well or better a slightly different way.

first, if this were scientific work i would expect person-b to publish their work citing person-a's work and showing how it was wrong or how it could be improved. this is done all the time in technical journals.

second, if this were a comercial product i would expect person-b to file a patent application with specific improvements on the original design... and if granted and if person-a wanted to use those changes person-a would have to buy them from person-b.

so fire up that patent process roy, you may have something here if fracky is so keen to squash it!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

3926. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8r52ghnh1@nnrp1.deja.com>
Source record: 178892

In article <39D56170.CD3ED4DC@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> klocko@toad.net wrote:
> > ... but powers (which are dot products of voltage and current)
> > don't combine.
>
> But of course, scalars are easier to combine than vectors/phasors.
> You just dump them in a bucket. If you know the number of seconds
> in the transmission line, you can convert watts to joules and the
> conservation of energy principle certainly applies. Consider a
> transmission line one second long with reflections and a Z0-match.
> Calculate the joules in the waves. The forward energy will equal
> the generated energy plus the reflected energy. Assuming lossless
> conditions, all energy generated by the generator and not radiated
> or dissipated by the load is still in the transmission line.

Here's some numbers for the example used in the original QEX article.
The transformer is a section of 75-ohm line joining 225-ohm line at the
source and 25-ohm line at the load. The source is 1 volt. Looking at the
right side of the 225-75 junction, the wave components (at steady state)
with the notation X|Y used for magnitude|phase are

partially transmitted toward the load
E = .5000|0
I = .006666|0
power = .003333

partially re-reflected toward the load
E = .1666|0
I = .002222|0
power = .00037

net toward load
E = .6666|0
I = .008888|0
power = .005925

On the 75-ohm section, the impedance is .6666/.008888 = 75. which
exactly tracks the characteristic impedance of the line. The power on
both the 225-ohm section and on the 25-ohm section is .00444, so all the
power generated by the source is transferred to the load. The power on
the 75-ohm section is greater than on either of the other sections.

Notice that the net power flowing toward the load on the 75-ohm section
is not the sum of the individual power flows. And please, for all the
physicists out there, let's not get into whether or not power flows -

that's a topic for another thread. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

3927. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Dick Hughes <dhughes33@earthlink.net>
Message-ID: <aj2cts08ro4pm7v3lhg3n7ajclkbrt6qck@4ax.com>
Source record: 178893

Four were compared in the March 1997 issue.

Dick - W6CCD

On 30 Sep 2000 14:48:54 GMT, k9sqg@aol.com (K9SQG) wrote:

>Does anybody know of the QST article, year and month, where they compared the
>losses and matching ranges of various commercial antenna tuners? Thanks.
>
>73s,
>
>Evan

3928. F.A. JERROLD FIELD STRENGTH METER

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <39D60C0F.B2BD3355@GTE.net>
Source record: 178894

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=454328889

3929. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <pgbWOdaws1xgGvACce+SWbo1PM+q@4ax.com>
Source record: 178895

On 30 Sep 2000 15:16:52 GMT, w1rfi@aol.com (W1RFI) wrote:

>
>It can be downloaded from (sorry, this one is on the members-only site):
>

Hmmm, This is a familiar sieve. This repository must hold the secrets to fractals to be so selective. Undoubtedly this org fosters the same perception of arrogance and through that is suffering a declining interest from the greater population of Hams.

Correlatable as far as I can tell. Causal? Seems so from the tenor of grief expressed by so many posters here for any of these organizations that hide their knowledge (errors?).

For groups desiring to be representative, it is a sad irony that they with-hold what some might find interesting. I bet $money$ underlies this motive.

All such organizations should observe the model of
http://www.qsl.net
to find Free and open publication and access to any data. qsl.net has $money$ issues too, but doesn't need to charge a 5 drink minimum for a fractal table dance (which is to say qsl.net is easily distinguishable from a chip-joint). How do they do it? Through subscription and "voluntary" contributions. Volunteerism - this seems to be a lost practice for some while an art for others.

73's
Richard Clark, KB7QHC

3930. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <39D6129E.4FBCB88A@eznec.com>
Source record: 178896

Thanks for the clarification.

I didn't answer the question because I don't know what "effective depth" is, but I'm glad you weren't so inhibited. And since neither of us knows quite what it is, you're right -- 1/2 is certainly as good as 0.69. Spot on, as always.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Dear Roy, try not to be so nit picking. Or have I misjudged
> you ? ;o)
>
> Somebody asked very vaguely what was an effective depth of
> the soil from an antenna's point of view. So in the absence
> of any suggestions from guru's like yourself, indeed
> avoidance, I offered a practical value of half of the skin
> depth.
>
> Why didn't you offer to the enquirer an effective depth of
> 0.69 times soil skin depth ? I wouldn't have quibbled
> about it.
>
> If you knew a litle more about the subject than the number
> 0.69 you would know that, assuming a uniform current
> distribution, the resistance of a surface slab of resistive
> material of thickness equal to the skin depth, with nothing
> at any greater depth, is the same as the actual resistance
> of an infinite depth of the material with an exponential
> current distribution versus depth.
>
> With a uniform distribution of current in a slab of
> thickness equal to the skin depth it seems resonable to
> assume the effective depth to be half of the skin depth.
> This applies equally to soil inductance and mutual
> inductance estimates.
>
> To illustrate the point a little further, on the subject of
> the characteristic impedance of coaxial transmission lines,
> where the radial dimensions of the coaxial conductors
> control Zo, when calculating inductance of the outer
> conductor it is usual to increase the effective radius by
> 1/2 of the skin depth. Similarly, the radius of the inner
> conductor is reduced by the same amount. This allowance for

> skin thickness has a significant effect on the impedance of
> lines at the lower radio frequencies.
>
> As for how else 'effective soil depth' could be useful you
> had better ask the person who asked for an estimate of it.
>
> It may be of some small interest that in some of my antenna
> programs I have used the concept of adding 1/2 soil skin
> depth to antenna height. This only affects matters when an
> antenna is very low or actually lying on the ground perhaps
> in the form of a radial ground wire. Even then it is not of
> vital consequence.
>
> What's a quarter of an S-unit, specially yours, more or less
> ? ;o)
> --
> --
> Regards from Reg, G4FGQ
> For free radio design software go to:
> http://www.btinternet.com/~g4fgq.regp
> --
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:39D53853.925C4F62@eznec.com...
> > Just what is the "effective depth", and how is it used?
> >
> > The depth which half the current is above and half below
> is 0.69 times
> > the skin depth. Where does the 1/2 come from?
> >
> > Roy Lewallen, W7EL
> >
> > Reg Edwards wrote:
> > >
> > > The effective depth of the ground can be taken as half
> the
> > > skin depth of the soil under the antenna. It depends on
> soil
> > > conductivity (or resistivity), permittivity and on
> > > frequency.
> > >
> > > Its not of great consequence. If you don't know the soil
> > > conductivity in your back yard just run some of it
> through
> > > your fingers and make a guess.
> > >
> > > To find skin HF depth of the soil use program SOILSKIN.
> > > Download from my website in a few seconds. Not zipped
> up.
> > > One small file only. Run immediately.
> > > --

> > > --
> > > Regards from Reg, G4FGQ
> > > For free radio design software go to:
> > > http://www.btinternet.com/~g4fgq.regp
> > > --

3931. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: kk5yyNOSPAM@arrl.net
Message-ID: <39d60f4e.41134205@nntp.mindspring.com>
Source record: 178897

On 30 Sep 2000 00:08:12 GMT, fractenna@aol.com (Fractenna) wrote:

>To All Readers:
>
>It has come to my attention that Roy Lewallen, W7EL, has posted an unauthorized
> copyrighted file on his
>
>http://www.eznec.com
>
>web site.
>

Nathan,

You ungrateful POS after Roy gave you a copy of Eznec now you're going

threatening him. You are truly lower than squid manure at the bottom
of the Mariana Trench. What a fractdirtbag.

I still think someone (I don't have the time) should do an analysis of

the time you spend posting this drivel vs. the time you are supposed
to be working, I think that would be fractinteresting.

BTW idiot this is not a threat, if you are being a bad monkey then it
is simply exposing waste, fraud and abuse and if not no harm no foul.

I hope this helps.

>The file is of a fractal antenna, commonly dubbed 'MI2' . The copyright holder
>of this material is Fractal Antenna Systems, Inc., which has not been ask for ,
>nor has granted, publication and distribution of this file by Mr. Lewallen.
>
>The file was transcribed by Steven Best and thus is a derivative work of the
>aforementioned copyright material, in which the copyrighted material is at
>least substantially recognizable in Best's rendition.
>
>It has been initially assumed that Mr. Lewallen was not aware of the copyright
>infringement, however in private correspondence he has chosen to deny that such
> copyright protection exists.
>
>Mr. Lewallen is being formally sent a letter requesting that he cease and
>desist the further distribution of this copyright material and will have until
>December 15, 2000 to comply. Failure to do so will lead to suit against Roy
>Lewallen d/b/a Lewallen consulting/EZNEC.
>
>Those who have downloaded this file are so advised that this is copyrighted

>material with an intended controlled distribution; it is not in the public
>domain; its web-based distribution does not constitute 'fair use'.
>
>Copies of the file are available--under held copyright--by request, to those
>members of the fractal antenna reflector:
>
>fractalantenna-subscribe@egroups.com
>
>In a few weeks, it will also be available as a conditional(licensed)download
>from the web site
>
>http://www.fractenna.com
>
>Readers are advised not to break copyright law by downloading said file from
>the EZNEC web site.
>
>Thank you for your help and understanding.
>
>Sincerely,
>
>Nathan Cohen, Ph.D.
>CTO
>Fractal Antenna Systems, Inc.

3932. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <39D61319.90A078D8@oio.net>
Source record: 178898

Richard Clark wrote:
>
> On 30 Sep 2000 15:16:52 GMT, w1rfi@aol.com (W1RFI) wrote:
>
> >
> >It can be downloaded from (sorry, this one is on the members-only site):
> >
>
> Hmmm, This is a familiar sieve. This repository must hold the secrets to fractals to be
> so selective. Undoubtedly this org fosters the same perception of arrogance and through
> that is suffering a declining interest from the greater population of Hams.
>
> Correlatable as far as I can tell. Causal? Seems so from the tenor of grief expressed by
> so many posters here for any of these organizations that hide their knowledge (errors?).
>
> For groups desiring to be representative, it is a sad irony that they with-hold what some
> might find interesting. I bet $money$ underlies this motive.
>
> All such organizations should observe the model of
> http://www.qsl.net
> to find Free and open publication and access to any data. qsl.net has $money$ issues too,
> but doesn't need to charge a 5 drink minimum for a fractal table dance (which is to say
> qsl.net is easily distinguishable from a chip-joint). How do they do it? Through
> subscription and "voluntary" contributions. Volunteerism - this seems to be a lost
> practice for some while an art for others.
>
> 73's
> Richard Clark, KB7QHC

I agree. I guess the amateur community is 'represented' in varrying
degrees... (The secret 'hand-shake' envolves 'palming' money.)
'Doc

3933. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <ugzWOTnKkGiAtXt3YbcPLI93xNLC@4ax.com>
Source record: 178899

On Sat, 30 Sep 2000 07:41:15 -0500, CAM <cam2338@bigfoot.com> wrote:

>Saying Walt was "wrong" is like saying Newton was "wrong".

Hmm, how would Einstein, Schrodinger, Planck and the rest of those assorted goofballs feel about this?

And lest we forget, how about the "other" Maxwell?

>Even if the
>concept of a "virtual short" does not stand up under a rigorous
>mathematical treatment, it is still a useful concept. A novice is
>much more likely to understand the concept of steady-state re-reflected
>power than to understand the infinite series of interference patterns
>that underlies the concept.

Hi Cecil,

The statement above is called hedging your bet.

The appeal to this strained logic of Walt's is that it is useful as a teaching aide. Unfortunately, the student must first understand what is supposedly being demonstrated, to understand what is being demonstrated. Walt's work is self-referential, that is, his chain of proofs presume the thesis is true to prove the thesis is true. Once accomplished, critics are dismissed if they attempt to presume the thesis is false - it has already been proven true.

Your allowing that
>a "virtual short" does not stand up under a rigorous
>mathematical treatment
is in marked contrast to Walt's rigorous mathematical treatment. Hence my assertion above of this logic being circular.

If this notion of virtual shorts and opens is simply a means to convey a concept, then Walt can state as much, as simply - and without the math. The student can then listen and observe - while understanding these are an artifice, clever but not necessarily correct. The student, then, when asking a question, can expect a specific and correct response - not an elaboration of that fiction which, when questions are pursued, becomes even more baroque.

73's
Richard Clark, KB7QHC

3934. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <39D5D350.2C2A933D@berkshire.net>
Source record: 178900

ok, where are the legal beagles... chip's own words seem to ring a bell that may point out why his copyright infringement claims won't stand up.

Fractenna wrote:
>
> The file was transcribed by Steven Best and thus is a derivative work of the
> aforementioned copyright material, in which the copyrighted material is at
> least substantially recognizable in Best's rendition.
>

> Those who have downloaded this file are so advised that this is copyrighted
> material with an intended controlled distribution; it is not in the public
> domain; its web-based distribution does not constitute 'fair use'.
>

'fair use' and 'derivative work'. use of published material is normally legal as long as it is properly attributed (see the "mi2 loop.txt" file in the same directory as the eznec model), and is not a substantial part of the original work. didn't i remember that roy transcribed this from a published article? as such it was surely just a single figure or two in that article and as such would probably be only a small part of the original work. and if the original wires table wasn't published at all as it sounds then there may even be doubt that it could have been copied in the first place. and being 'recognizable' doesn't necessarily prove infringement. the use of the main melody of very recognizable songs is legal for parodies with new lyrics. speaches and recognizable writings are frequently, and legally, modified and published as parodies. copying and quoting technical work of others then improving or adding to it is a standard practice and does not require prior permission unless using a substantial part of the orginal work.

look at this from a more generic point of view with this situation:
1. person-a publishes an article with pictures, graphs, and word descriptions of a design for item-x. they make certain claims that item-x works a particular way. they do not publish their design files or specific parts of them that would let someone else duplicate their work.
2. person-b reads the article and says 'i can do better'. taking the description of item-x and looking at the pictures they reverse engineer item-x and create their own model of how it works in a different (or even the same) modelling program. from that derived model they learn how item-x performs and find that it has some shortcomings and can be done just as well or better a slightly different way.

first, if this were scientific work i would expect person-b to publish their work citing person-a's work and showing how it was wrong or how it could be improved. this is done all the time in technical journals.

second, if this were a comercial product i would expect person-b to file a patent application with specific improvements on the original design... and if granted and if person-a wanted to use those changes person-a would have to buy them from person-b.

so fire up that patent process roy, you may have something here if fracky is so keen to squash it!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

3935. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <xhfWOVYtxuABTjBsBM1ZXAz97GYs@4ax.com>
Source record: 178901

On Sat, 30 Sep 2000 07:25:37 -0500, CAM <cam2338@bigfoot.com> wrote:

>Nick Kennedy wrote:
>> If we have a black box (voltage source and
>> series impedance assumed), we can measure its impedance by loading it to a
>> certain current draw and measuring the terminal voltage, then changing the
>> current drawn and measuring the voltage again. This should allow a fairly
>> easly calculation of the series impedance in that Thevenin box.
>
>Unfortunately, multiplying that series impedance by the square of the
>current through it often does not yield the true dissipation inside the
>generator. Why not?

Hi Cecil,

What is this
I * I * Z
you speak of?

73's
Richard Clark, KB7QHC

3936. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D5F4DB.7BBF@pacbell.net>
Source record: 178902

CAM wrote:
>
> Donaly wrote:
> > It may, indeed, be a conceptual error, such as treating hydraulic
> > fluid as a liquid when everyone knows it's just a collection of
> > molecules. However, you may want to read the text, Field
> > and Wave Electromagnetics, by David K. Cheng, where he reduces all
> > the small reflections to a closed form expression using the
> > binomial theorem -although he doesn't explicitly identify the
> > binomial theorem as such- which gives expressions for voltage and
> > current -sinusoidal- at any point on a transmission line. It probably
> > won't convince you Walt is right, but it should give you food
> > for thought.
>
> Saying Walt was "wrong" is like saying Newton was "wrong". What Walt
> says works in the same way that what Newton said works. Even if the
> concept of a "virtual short" does not stand up under a rigorous
> mathematical treatment, it is still a useful concept. A novice is
> much more likely to understand the concept of steady-state re-reflected
> power than to understand the infinite series of interference patterns
> that underlies the concept.
> --
> 73, Cecil, W6RCA http://www.mindspring.com/~w6rca

I don't know whether Walt is right or wrong, because I haven't
been able to get his book. I do believe, however, that before
any guru, such as Gary, condemns Walt as wrong, that guru should
make the intellectual effort necessary to thoroughly understand
the subject, himself. People may balk at having to think about
an infinite number of reflections, but the point is that they
don't have to. Newton and others made that possible in the
17th and 18th centuries. As for Walt's use of metaphor in order to
explain the energy movement in transmission lines, there's nothing
wrong with that as long as the metaphor isn't too strained. Popular
science writers do it all the time. It may be too elementary for
a polymath such as Gary, but for ordinary people who don't have
time to learn the sometimes mind-boggling physics and its attendant
mathematics it works very well.

73

Tom Donaly KA6RUH

3937. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <39D5FBD5.47DA@pacbell.net>
Source record: 178903

William E. Sabin wrote:
>
> Nick Kennedy wrote:
>
> > Is this shift in calculated
> > resistance the non-dissipative resistance we're taking about? If it is, I
> > still don't see how it's going to affect efficiency.
>
> Yes, it is a dynamic, lossless resistance. The output resistance of a tube or
> transistor PA is actually an internal negative feedback effect. That is, the
> variations of *plate voltage* produce variations of *plate current* because of
> an inherent characteristic of the vacuum tube design, called its plate
> resistance. This plate resistance is equivalent to a gain reduction. That is,
> the voltage gain of the tube with plate resistance is *less* than the voltage
> gain of the tube without the plate resistance "effect". Plate resistance itself
> does not dissipate power. It is not a physical entity. For example, it does not
> get hot and it is not a source of thermal noise, like an ordinary resistor.
>
> If a tube without the plate resistance effect is replaced with an almost
> identical tube that does have a plate resistance effect, that effect can be
> nullified by increasing the grid drive a little. This restores the tube to its
> previous voltage gain and its previous power output and efficiency. This
> verifies that plate resistance is a lossless "resistance" (dV/dI).
>
> Bill W0IYH

The fact that you use a differential operator on the ratio
of voltage to current means that the ratio isn't a constant as it is in
say a lump of carbon - O.K., as long as the carbon doesn't get
too hot. This is liable to cause some confusion in the minds of
people who are looking for "the resistance" of the plate in question.
Power amplifiers don't behave the same way passive devices do, and
attempts to linearize them in order to understand them using
circuit theory may eventually cause more confusion than understanding.

Tom Donaly KA6RUH

3938. Re: Bad behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <8r56av$d53$1@nntp9.atl.mindspring.net>
Source record: 178904

Yes, and I have killfiled this bozo and his derivatives but the thread keeps changing. It would be very helpful if everyone would decide on a word that could be put in the header to signify that the post is pertaining to this fool so that it would be easy to filter out. I have been reading this group for about three years. I have seen this twerp, excuse me, twerp PHD, go from a relatively minor annoyance to a major PIA. I have also noticed the absence of people who (whom?) in the past I had learned a great deal from. They have undoubtedly become tired of wading through the BS to find anything useful, as have I. I now only occasionally red this group where in the past it was the first on the list. It is a shame to see it this way as the information gleaned from this group is available nowhere else.
--
CW
KC7NOD
"Zombie Wolf" <zmbwf@acadia.net> wrote in message
news:sta3jom4vdkdb1@corp.supernews.com...
> Have you ever considered learning how to use your filters ?
>
> "Larry Benko" <benko@aztek-eng.com> wrote in message
> news:39CFFF7E.7BFEFB55@aztek-eng.com...
> > One persistent JERK has caused several people to leave the
> > group in disgust. This behavior continues and the JERK does
> > not appear to have a conscience or any self decency. This
> > really upsets me as I enjoy learning from several of the
> > experts provided that I can weed through the nonsense.
> >
> > Has the group ever considered going to a moderated group with a
> > reasonable posting policy? I know that many folks don't like
> > the idea of a moderated group but virtually everyone dislikes
> > the constant behavior of this one person who can't possibly
> > have so much free time and a job. This would fix most of the
> > problems and instantly reduce the number of posts by 1/6th
> > without loss of any content. Remember that this one bad apple
> > is responsible for 1/6th of the posts. I don't know who would
> > want the unenviable job of moderator. Am I way off base here
> > or do some folks actually enjoy this infantile behavior?
> >
> > Larry, W0QE
>
>

3939. Re: Lo-visibility mobile antenna info, please

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: John Burrell <john@tg8ozh.com>
Message-ID: <1ipB5.5285$j4.393816@nnrp3.clara.net>
Source record: 178905

Hi Cecil,

Are you thinking of .co.uk perhaps? I think that was pretty much the standard for many years, along with edu.uk and gov.uk etc. I don't recall seeing .gb at any time but I'm certainly not an internet freak so don't place too much reliance on that!
I recently did a search on my callsign and was offered the choice of domain names .com .net (and a couple of others I don't recall) from a US source. Seemed good to me so I paid up and steered the email back to my existing isp and here we are. Nice simple email address which I can even remember myself.....

I checked your site and have also downloaded some info from Hustler and several other manufacturers. Predictably the commercial data adds to the dilemma as it becomes necessary to cut out the 'sales-speak' before trying to assess what is on offer. Your shoot-out is at least a real world assessment rather than computer predictions or carefully chosen anechoic chamber measurements.

The responses so far have confirmed what we all know inasmuch as small inconspicuous antennas are never going to be efficient compared to putting lots of metal in the air. I was just hoping that someone had perhaps followed this path before and arrived at a 'best solution'. I'm quite willing to let someone else do some of the legwork and from following the newsgroup for a few weeks it is obvious that there is a wealth of prior legwork here.

Thanks for your interest and 73, John G8OZH

3940. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Eddie Bryant N4UMJ <N4UMJ@carolina.rr.com>
Message-ID: <YhpB5.1883$jJ4.775474@typhoon.southeast.rr.com>
Source record: 178906

I know of several Magazine stores here locally that carry QST.
Also the local community college is a good place to browse for free as well which is what I did
before subscribing(joining ARRL) in 1986 to receive their magazine.
Incidentally I was not a ham at the time I joined. I was just interested in getting
their magazine. You can get on CD ROM all the magazines that I have currently received boxed away plus
another 16 years at a still cheaper price than I paid for subscribing for 14 years. That's 25 years
worth of QST reading. As for the declining interest of ham radio
it is common knowledge that most hams do not subscribe to Ham related magazines.Wayne Green of 73' magazine comments on this all the time. I can understand.
Currently I receive over 1/2 a dozen radio related magazines monthly. It keeps one busy.
That's why I still prefer the ability to carry the magazine with me and read as time permits.
In the years since I first joined and started receiving QST, it has changed dramatically.
You no longer see the multi-month construction projects but see more in a nutshell articles.
Sometimes the reviews are not unbiased either.
For instance an ICOM R-75 receiver ,that I am interested in ,the QST review made no note at all that the
synchronous detection was a weak point in the radio if not functional at all.
This has been documented by many others.
But the QST reviewer missed it.
So crosscheck your reviews. They may have missed something.

73's Ed

This is a common practice to withold printing
Richard Clark <rwclark@rwclark.seanet.com> wrote in message news:pgbWOdaws1xgGvACce+SWbo1PM+q@4ax.com...
> On 30 Sep 2000 15:16:52 GMT, w1rfi@aol.com (W1RFI) wrote:
>
> >
> >It can be downloaded from (sorry, this one is on the members-only site):
> >
>
> Hmmm, This is a familiar sieve. This repository must hold the secrets to fractals to be
> so selective. Undoubtedly this org fosters the same perception of

arrogance and through
> that is suffering a declining interest from the greater population of
Hams.

3941. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D621AE.C8458DF4@mwci.net>
Source record: 178907

Donaly wrote:

> The fact that you use a differential operator on the ratio
> of voltage to current means that the ratio isn't a constant as it is in
> say a lump of carbon - O.K., as long as the carbon doesn't get
> too hot. This is liable to cause some confusion in the minds of
> people who are looking for "the resistance" of the plate in question.
> Power amplifiers don't behave the same way passive devices do, and
> attempts to linearize them in order to understand them using
> circuit theory may eventually cause more confusion than understanding.

In a previous post just yesterday I discussed this. It is true that there are some nonlinearities in the plate "resistance", whose value is dV/dI. But a tuned filter, or even a low pass filter, smooths out these variations so that the filtered output has an "average" value of dynamic resistance at the fundamental RF frequency. In a high quality linear amplifier these variations are not very large.

The problem is that as the level of modulation changes this average value also changes. I believe that a two-tone output signal with low intermodulation distortion is the best signal for evaluating the "large signal" dynamic resistance over the full range of the *modulation* signal.

If you look at the constant-current curves of a tube you can see the nonlinearities. The plate resistance variations contribute to the nonlinearities.

Bill W0IYH

3942. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: klocko@toad.net
Message-ID: <8r58ma$50t$1@nnrp1.deja.com>
Source record: 178908

In article <39D54D4C.3680@pacbell.net>,
dtdonaly@pacbell.net wrote:
> I thought voltages, in the form of E1 and E2 above were complex
> numbers, not vectors. You can do more ordinary type arithmetic
> with complex numbers than you can with vectors (division of one
> vector into another is not allowed using three dimensional
> vectors, also, the cross product of two vectors is not commutative.)
> I was also under the impression that voltage was always a scalar
> quantity, since E=-delV, where E is a vector and V is a scalar,
> so I thought it was impossible to take the dot product of V and I.
> Of course, you can always just multiply them using the rules that
> apply to complex numbers. Is that what you have in mind? If
> you guys are going to start talking about fields, vectors and
> power, you might want to get a book on electromagnetics and read
> through the part on the *divergence* of the Poynting Vector. I
> believe you'll find it very illuminating.

Hi Tom,
Yes, they're complex numbers, but they can be represented as vectors.
The usual vector operations like addition and dot product apply. For
instance, to add two phasors in cartesian form (x+jy), add their
separate components. The cosine of the angle between V and I is the
power factor. And so on. I hope this won't diverge into
electromagnetics. 73,
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

3943. Re: QST article comparing tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000930133419.15692.00000373@ng-ff1.aol.com>
Source record: 178909

>Four were compared in the March 1997 issue.<

Was that Frank Witt's review? If so, you may wish to take the numbers with a grain of salt. As I recall, his methodology yielded inaccurate data.

Rick K1BQT

3944. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <20000930133834.15692.00000374@ng-ff1.aol.com>
Source record: 178910

Hi Ed--

Sounds fair enough to me.

73 Rick K1BQT

3945. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <oCjWORYvrCXEaXc02p+OkqY54GtN@4ax.com>
Source record: 178911

On Sat, 30 Sep 2000 14:57:28 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>
>"Tom W8JI" <2w8ji@contesting.com> wrote in message
>news:39d49b51.15415278@news.akorn.net...
>> On Fri, 29 Sep 2000 12:50:00 GMT, "VE9SRB" <srbest@worldnet.att.net>
>> wrote:
>>
>> >100 watts + 100 watts does not "add" to become 200 watts. This would
>only
>> >be true if the voltages associated with each power were 90 degrees out of
>> >phase. If the voltages were in phase, 100 watts plus 100 watts would add
>to
>> >become 400 watts
>> >The voltages in a transmission line are complex and add
>> >as vectors. Vtotal = V1 + V2 (adding as vectors). Ptotal = |Vtotal|^2 /
>Z.
>> >Assuming Z is a pure resistance.
>>
>> It sounds like you are saying the voltage doubles at a reflection, and
>> current doubles at the same time causing power to increase by four.
>>
>> Can you explain in detail how that would happen?
>>
>> 73 Tom
>
>Hi Tom:
>
>Thank you for asking for an explanation. I appreciate it very much. I will
>address your comments and hopefully those of Cecil and others as well.
>
>First, Cecil is correct that power is a scalar quantity but it is important
>to understand that total power is determined from the addition of complex
>voltage phasors and complex current phasors, not from the direct addition of
>the scalar quantity of power.
>
>In all transmission line systems (assuming that Z0 is purely resistive) the
>forward traveling power in the transmission can be found simply as follows:
>
>Pforward = |Vforward| * |Iforward|
>
>OR
>
>Pforward = |Vforward|^2 / Z0

>
>OR
>
>Pforward = |Iforward|^2 * ZO
>
>Let's look at it from the perspective of voltage. Let's assume that the
>transmitter delivers a forward voltage to the 300 ohm line having a
>magnitude equal to 173.2 volts. This equates to a forward traveling power
>of 100 watts. Here's the first problem, knowing only the power, we have no
>idea as to the what the phase of the voltage is. It could be 0 degrees, 90
>degrees, 180 degrees, etc.
>
>Now, lets assume that the voltage re-reflection at the match point has a
>magnitude of 173.2 volts as well. This equates to a re-reflected power of
>100 watts. Again, we have no idea as to what the phase of the voltage is.
>
>Now we need to determine the total forward traveling power in the
>transmission line. We know that the total forward traveling wave is equal
>to the sum of the transmitter wave plus the re-reflected wave. Looking at
>power, most people immediately assume that 100 watts plus 100 watts is equal
>to 200 watts.
>
>The addition of the transmitter wave and the re-reflected wave occurs as
>follows:
>
>Vtotal = Vtransmitter + Vre-reflected AND Itotal = Itransmitter +
>Ire-reflected.
>
>The important point is that all we know from the system power are the
>magnitudes of the voltage not the phase. As a result, we cannot correctly
>add 173.2 volts + 173.2 volts as vectors. I'll use the "@" symbol to
>represent phase.
>
>IE. 173.2 @ 0 + 173.2 @ 0 = 346.4 @ 0 volts for which the power is
>equal to 400 watts.
>
>173.2 @ 0 + 173.2 @ 90 = 244.94 @ 45 volts for which the power is equal
>to 200 watts
>
>173.2 @ 0 + 173.2 @ 180 = 0 volts for which the power is equal to 0
>watts.
>
>Based on this fact, we see that 100 watts in phase with 100 watts cannot
>equal 200 watts. In the case of the example presented by Cecil, we know
>that we have 200 watts of forward power. So, if the total forward power is
>200 watts, what's my explanation of what's really happening?? What's
>happening in Cecil's example is that the transmitter does not deliver 100
>watts of power to the 300 ohm line AND the re-reflected power is not 100
>watts. I'll discuss this in another post.
>

>As for the conservation of energy, it only requires one thing: that the
>total power dissipated in the transmission line system be equal to the total
>power delivered to the system by the transmitter.
>
>When examining the wave reflections, we should be able to maintain the
>correct relationships between adding voltage and determining total power.
>
>73,
>Steve
>

Hi Steve,

This re-reflecting business is making my head swim. What is the source of the first and all subsequent reflections? An enumeration is enough. Reflection Co-efficients would be nice too, unless that anticipates your presentation too much.

73's
Richard Clark, KB7QHC

3946. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <TbqB5.4103$mB3.219892@newsread2.prod.itd.earthlink.net>
Source record: 178912

Hey guys - how about using the word Fractenna or some variant containing at least "frac" for this rubbish. Otherwise it gets through my newsgroup filters.

--
Floyd Sense - Angier, NC
"Gunner Dave" <gunnerd@earthlink.net> wrote in message news:39D4EE00.FFBE3159@earthlink.net...
> But He Is SO funny!
>
> Bill Aycock wrote:
> >
> > The reader should be aware that the individual responsible for the
> > screen name "Fractenna" is a known troll and has been banned from
> > several mailing lists dedicated to Ham Radio. His "discussions"
> > inevitably lead to strife.
> >
> > ANY response to him is likely to lead to a disagreeable interaction. If
> > you doubt this, please view the archives for this News Group, with
> > particular attention to the screen name "Fractenna".
> >
> > He is an ego-driven person who does not react well to ANY disagreement
> > or difference with his position. He has been known to misquote,
> > misinterpret and distort messages from others that put him in a poor
> > light. He has done damage to some people, off line, because he saw them
> > as a danger to his "reputation".
> >
> > Be warned
> >
> > Fractenna wrote:
> > >
> > > QST--
> > >
> > > You are invited to join one or all of the following lists on e-groups(formerly
> > > onelist). All these reflectors are e-mail based, friendly, objective, and
> > > moderated ,so that no spam, porn, off-topic, or personal-offensive posts are
> > > sent out. You will receive no off-list e-mails by subscribing: again; no spam.
> > > Occasionally free offers of antenna files and other info are presented, along
> > > with photos of relevant antennas (unlike most NG's you CAN do

attachments).
> > >
> > > These lists (with average recent subscriber sizes) are:
> > >
> > > ANTENNAS@EGROUPS.COM 190 members
> > > CROSSFIELDANTENNA@EGROUPS.COM 70 members
> > > FRACTALANTENNA@EGROUPS.COM 260 members
> > >
> > >
> > > Please review the descriptions at:
> > >
> > > http://www.egroups.com
> > >
> > >
> > > Please note the CFA list specifically deals with this antenna in an
objectively
> > > critical fashion and no posts will be allowed that make grandiose
claims
> > > without supporting data presented. To date, no data has been presented
which
> > > requires the extraordinary claims made by some pundits: there is no
evidence
> > > for better performance than any other small vertical antenna (and that
> > > performance is poor).
> > >
> > >
> > > Fractal antenna posts should go the the fractal antenna reflector; not
the
> > > antennas reflector.
> > >
> > > To subscribe to any list, either go through the process at egroups, or
to skip
> > > the process (and some say 'annoying questions') just do:
> > >
> > >
> > >
> > > ----------------- -subscribe@egroups.com
> > >
> > > where the ------------ is the name of a given list (such as
'fractalantenna')
> > >
> > >
> > > If you have a specific question on this post, please e-mail me off-NG
at
> > > chipn1ir@aol.com.
> > >
> > > 73,
> > > Chip N1IR
>

3947. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930142919.19686.00000376@ng-cu1.aol.com>
Source record: 178913

>Hey guys - how about using the word Fractenna or some variant containing at
>least "frac" for this rubbish. Otherwise it gets through my newsgroup
>filters.
>
>--
>Floyd Sense - Angier, NC
>"Gunner Dave" <gunnerd@earthlink.net> wrote in message
>news:39D4EE00.FFBE3159@earthlink.net...
>> But He Is SO funny!
>>
>> Bill Aycock wrote:
>> >
>> > The reader should be aware that the individual responsible for the
>> > screen name "Fractenna" is a known troll and has been banned from
>> > several mailing lists dedicated to Ham Radio. His "discussions"
>> > inevitably lead to strife.
>> >
>> > ANY response to him is likely to lead to a disagreeable interaction. If
>> > you doubt this, please view the archives for this News Group, with
>> > particular attention to the screen name "Fractenna".
>> >
>> > He is an ego-driven person who does not react well to ANY disagreement
>> > or difference with his position. He has been known to misquote,
>> > misinterpret and distort messages from others that put him in a poor
>> > light. He has done damage to some people, off line, because he saw them
>> > as a danger to his "reputation".
>> >
>> > Be warned
>> >
>> > Fractenna wrote:
>> > >
>> > > QST--
>> > >
>> > > You are invited to join one or all of the following lists on
>e-groups(formerly
>> > > onelist). All these reflectors are e-mail based, friendly, objective,
>and
>> > > moderated ,so that no spam, porn, off-topic, or personal-offensive
>posts are
>> > > sent out. You will receive no off-list e-mails by subscribing: again;
>no spam.
>> > > Occasionally free offers of antenna files and other info are
>presented, along
>> > > with photos of relevant antennas (unlike most NG's you CAN do

>attachments).
>> > >
>> > > These lists (with average recent subscriber sizes) are:
>> > >
>> > > ANTENNAS@EGROUPS.COM 190 members
>> > > CROSSFIELDANTENNA@EGROUPS.COM 70 members
>> > > FRACTALANTENNA@EGROUPS.COM 260 members
>> > >
>> > >
>> > > Please review the descriptions at:
>> > >
>> > > http://

Floyd--

Once a month I post this invitation to folks on this NG. Its quite alright with me if it doesn't suit your needs. But to brand this and my other posts as "rubbish" tells others that they shouldn't have the right to decide for themselves.

Could you kindly tell us what experience--negative or positive--you had on these groups which led to your characetrization as "rubbish".

Or.,do you not mean to say, instead, that it just isn't something that has a personal interest--to you?

73
Chip n1IR

3948. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r5bihiou1@neptunium.btinternet.com>
Source record: 178914

Roy asked -

> What does the output of your rig do when it's confronted
with 1.8:1 SWR?

==========

I have an Icom 735.

I tested it at 1.9 MHz in FM mode using a small number of resistive loads of known values, doing nothing except changing the load resistance and determining the load power by measuring the RF voltage across it. I don't trust SWR meters.

Load ohms SWR Rel Power

17 3 70 %
34 1.5 91 %
50 1.0 100 %
97 1.9 89 %
113 2.3 78 %

Draw a best-fit parabola through these points and when the SWR is 1.8 the two relative power levels are 84 % and 92 % which I admit are higher than I expected.

Whether any SSB distortion due to PA non-linearity occurs at these relatively high SWR's I don't know. Doesn't matter on CW and FM of course.

On closer inspection of the ALC circuitry I see that the SWR bridge Forward voltage takes control until the Reflected voltage exceeds some critical value at which point the reflected voltage is used to throttle back the PA drive.

Excessive PA current is not prevented by any RF measurement but simply by detecting the DC collector current. When the DC current exceeds some critical value a control signal is fed into the ALC line.

I am not familiar with your Bird wattmeter. Does it measure load power directly in some manner or by indicating the difference between forward and reflected power levels ? Does it first have to be calibrated or "set" in conjunction with a 50-ohm standard load ?

Reg.

3949. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930145617.17974.00000325@ng-cr1.aol.com>
Source record: 178915

>
>
>Fractenna,
> Why don't you take your silliness somewhere else for a while?
>All of this crap is really getting old. If your going to sue him,
>them sue him. I certainly don't need to hear about it, and I really
>doubt if anyone else wants to either.
> Pesonally, I don't see how you can stand to look at yourself
>in a mirror...
> 'Doc
>
>

Excuse me;

First, I have no reason personally to even think of Roy Lewallen or his company. So what you state is not only not possible, but not relevant.

Second, this public notice was posted--appropriately--on the same public NG as Roy Lewallen's public announcement about his (unauthorized) publication and distribution of the MI2 file.

Fractal Antenna Systems, Inc., which is the copyright holder, see no reason at present to pursue a lawsuit. That will change depending on what actions are taken before December 15, 2000 by Mr. Lewallen.

But, so you know, Mr. Lewallen has privately corresponded in words that indicate that ANY public disclosure of Mr. Lewallan's unuathorized publication and distribution will be interpreted as a basis for actions against Fractal Antenna Systems, Inc.

Copyright holders commonly, indeed must, inform the public when unuathorized use of copyright material is occurring in a very public and accessible medium such as the internet. If FAS did NOT disclosed this unauthorized use (after Mr. Lewallen refused to accept the situation and indicated he would not remove it) then it would be interpreted as a 'go ahead' for piracy.

I hope this helps.

Nathan Cohen, Ph.D.
CTO
Fractal Antenna Systems, Inc.

3950. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930145702.17974.00000326@ng-cr1.aol.com>
Source record: 178916

>
>When he looks in the mirror, he sees
>the most beautiful person he has ever seen....
>that's the problem...

When I look in the mirror,I see a head in need of combing.

Hope this jelps.

73
Chip n1IR

3951. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <fYqB5.228189$c5.4597191@news2.rdc1.on.home.com>
Source record: 178917

>
> Floyd--
>
> Once a month I post this invitation to folks on this NG. Its quite alright
with
> me if it doesn't suit your needs. But to brand this and my other posts as
> "rubbish" tells others that they shouldn't have the right to decide for
> themselves.
>
> Could you kindly tell us what experience--negative or positive--you had on
> these groups which led to your characetrization as "rubbish".
>
> Or.,do you not mean to say, instead, that it just isn't something that has
a
> personal interest--to you?
>
> 73
> Chip n1IR

Chirp it is because anything that is related to you, people want nothing to
do with. You have proven yourself to be a horse's ass time and time again.

Barry D.

3952. Re: QST: INVITATION TO 3 ANTENNA-RELATED LISTS (REFLECTORS)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: fractenna@aol.com
Message-ID: <20000930153124.17670.00000352@ng-cc1.aol.com>
Source record: 178918

>Chirp it is because anything that is related to you, people want nothing to
>do with. You have proven yourself to be a horse's ass time and time again.
>
>Barry D.
>
>
>

Barry--

You are being demeaning.

What is the intent of your post, given that it couldn't possibly be true? For example: over 450 different folks subscribe yo the reflectors so listed.

Are you callung them "horse's asses"--as you say-- for doing so?

73
Chip n1IR

3953. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r49mr$7f0$1@slb3.atl.mindspring.net>
Source record: 178961

Thread:

"Running" a 10m contest at the top of a sunspot cycle is like shooting
goldfish in a fishbowl!

Where's the skill and technical competence in that?

What?

Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20000927180345.29694.00000363@ng-mf1.aol.com...
> >Rick picked up on Yuri making the 3.5 trophy, but--he missed the report
> >back in the back that also shows the BIG TIME, for Yuri.
> >He is listed as the all-time record holder for North America, CW, on
> >Topband,(1.8) which he set in '98.
> >
> >Bill-W4BSG
> >
> >
>
> Unfortunately working DX contests on 80 or 160 does not require the same
skill
> set as someone running a 10M contest.
>
> I, personally, don't think Yuri has sufficient skills to beat me.
>
> 73
> Chip N1IR

3954. Re: Yuri keeps doing it

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <8r49uqbba1@slb7.atl.mindspring.net>
Source record: 178962

Jim:

You got it wrong, there is an adjectival modification in that listing...

Excellent Troll... see Letterman, David

Bad/patently obvious troll... see Cohen, Nathan.

Peter K1PO

"Jim Pennino" <jimp@mail.specsol.com> wrote in message
news:dn6uq8.aq4.ln@mail.specsol.com...
> Fractenna <fractenna@aol.com> wrote:
>
>
> > Watza troll?
>
> See Cohen, Nathan.
>
> Jim Pennino
>

3955. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <stbdktpaqaegaa@corp.supernews.com>
Source record: 178963

Hello again ...

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:39d52710.11530175@news.akorn.net...
> On Fri, 29 Sep 2000 15:44:45 -0500, "Nick Kennedy"
> <nkennedy@tcainternet.com> wrote:
>
> >I think we'd be in big trouble if generators *were* matched to their
load.
> >Maximum power transfer is not desired. Supplying the connected demand,
no
> >more and no less, with maximum efficiency is the aim.
>
>
> So what your saying is, we want ten horspower applied for every
> kilowatt out, or something similar?
>

No, I'm definitely not saying that. That would yield about 13% effiiciency,
which I wouldn't call "maximum" by any means. I'd think a big modern
generator probably does aound 99%.

>
> >The generator's impedance (especially the real part) is made as low as
> >possible. To raise it to equal the load resistance would be destructive.
> >
> >73--Nick, WA5BDU
>
> The generator's "real part" is raised as the load resistance decreases
> (higher resistance load) and decreased as the load resistance
> decreases. The dissipative part of the generator's impedance is made
> as small as possible within cost limitations.
>

I don't understand what the non-dissipative part is, assuming we're not
talking about reactance here. More later ...

> The feedback loop that sense load current backs-off the generator's
> field excitation, which has the effect of raising the non-dissipative
> "resistance" of the generator.
>
> If it didn't, the system would have terrible efficiency at middle load
> ranges.
>
> Remove the feedback, and adjust the generator's field for proper
> operation at a given load, and you'll find in a well designed

> generator it acts just like the generator is sourcing through a
> resistance close to the load resistance in value...with very little of
> that resistance making heat.
>
> 73 Tom

I don't think so. It's true that a typical power plant generator will have an automatic feedback system controlling the field current. But this isn't used to optimize efficiency. It's to regulate terminal voltage. (Actually, when the generator is alone supplying a load, the field adjustment controls the voltage, and when the generator is feeding a grid (many generators and loads), the field adjustment controls the VAR loading).

The generator is going to be fairly efficient whether half loaded or fully loaded, although efficiency will probably be best at full load, due to certain fixed losses. You could put the excitation control in "manual" and run the field current (and therefore output voltage) up and down some and not affect efficiency a heck of a lot. Of course, some of loads may not be too crazy about those voltage excursions.

I'm confused about this concept of a non-dissipative, dynamic type of resistance. It really confuses me in postings on rf amplifiers--maybe I can get a handle on it with generators.

I'll take a shot at it myself. If we have a black box (voltage source and series impedance assumed), we can measure its impedance by loading it to a certain current draw and measuring the terminal voltage, then changing the current drawn and measuring the voltage again. This should allow a fairly easly calculation of the series impedance in that Thevenin box.
Now, if the thing in the box has a feedback control system and the voltage source isn't fixed but variable ... the feedback control could crank the voltage back up to its former value as current is increased. Because we assumed a fixed ideal voltage source and series impedance, we now calculate a much lower value of apparent internal resistance. (Zero, if the voltage doesn't droop at all with increased current.) Is this shift in calculated resistance the non-dissipative resistance we're taking about? If it is, I still don't see how it's going to affect efficiency.

Ah, antennas, great big generators, and conjugate matches ...

73 and good night--

Nick, WA5BDU

3956. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <39D5C19C.229FEF13@mwci.net>
Source record: 178964

Nick Kennedy wrote:

> Is this shift in calculated
> resistance the non-dissipative resistance we're taking about? If it is, I
> still don't see how it's going to affect efficiency.

Yes, it is a dynamic, lossless resistance. The output resistance of a tube or transistor PA is actually an internal negative feedback effect. That is, the variations of *plate voltage* produce variations of *plate current* because of an inherent characteristic of the vacuum tube design, called its plate resistance. This plate resistance is equivalent to a gain reduction. That is, the voltage gain of the tube with plate resistance is *less* than the voltage gain of the tube without the plate resistance "effect". Plate resistance itself does not dissipate power. It is not a physical entity. For example, it does not get hot and it is not a source of thermal noise, like an ordinary resistor.

If a tube without the plate resistance effect is replaced with an almost identical tube that does have a plate resistance effect, that effect can be nullified by increasing the grid drive a little. This restores the tube to its previous voltage gain and its previous power output and efficiency. This verifies that plate resistance is a lossless "resistance" (dV/dI).

Bill W0IYH

3957. Europeens repeaters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: F6GKD <f6gkd@wanadoo.fr>
Message-ID: <8r4hf0$a1d$1@wanadoo.fr>
Source record: 178965

http://www.ref-union.org/cnrr/
--
F6GKD

3958. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r4jov$8u7$1@neptunium.btinternet.com>
Source record: 178966

Dear Roy, try not to be so nit picking. Or have I misjudged you ? ;o)

Somebody asked very vaguely what was an effective depth of the soil from an antenna's point of view. So in the absence of any suggestions from guru's like yourself, indeed avoidance, I offered a practical value of half of the skin depth.

Why didn't you offer to the enquirer an effective depth of 0.69 times soil skin depth ? I wouldn't have quibbled about it.

If you knew a litle more about the subject than the number 0.69 you would know that, assuming a uniform current distribution, the resistance of a surface slab of resistive material of thickness equal to the skin depth, with nothing at any greater depth, is the same as the actual resistance of an infinite depth of the material with an exponential current distribution versus depth.

With a uniform distribution of current in a slab of thickness equal to the skin depth it seems resonable to assume the effective depth to be half of the skin depth. This applies equally to soil inductance and mutual inductance estimates.

To illustrate the point a little further, on the subject of the characteristic impedance of coaxial transmission lines, where the radial dimensions of the coaxial conductors control Zo, when calculating inductance of the outer conductor it is usual to increase the effective radius by 1/2 of the skin depth. Similarly, the radius of the inner conductor is reduced by the same amount. This allowance for skin thickness has a significant effect on the impedance of lines at the lower radio frequencies.

As for how else 'effective soil depth' could be useful you had better ask the person who asked for an estimate of it.

It may be of some small interest that in some of my antenna programs I have used the concept of adding 1/2 soil skin depth to antenna height. This only affects matters when an antenna is very low or actually lying on the ground perhaps in the form of a radial ground wire. Even then it is not of vital consequence.

What's a quarter of an S-unit, specially yours, more or less
? ;o)
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Roy Lewallen <w7el@eznec.com> wrote in message
news:39D53853.925C4F62@eznec.com...
> Just what is the "effective depth", and how is it used?
>
> The depth which half the current is above and half below
is 0.69 times
> the skin depth. Where does the 1/2 come from?
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > The effective depth of the ground can be taken as half
the
> > skin depth of the soil under the antenna. It depends on
soil
> > conductivity (or resistivity), permittivity and on
> > frequency.
> >
> > Its not of great consequence. If you don't know the soil
> > conductivity in your back yard just run some of it
through
> > your fingers and make a guess.
> >
> > To find skin HF depth of the soil use program SOILSKIN.
> > Download from my website in a few seconds. Not zipped
up.
> > One small file only. Run immediately.
> > --
> > ---------------------------------------
> > Regards from Reg, G4FGQ
> > For free radio design software go to:
> > http://www.btinternet.com/~g4fgq.regp
> > ---------------------------------------

3959. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D5DAA9.53A31979@bigfoot.com>
Source record: 178967

Donaly wrote:
> I thought voltages, in the form of E1 and E2 above were complex
> numbers, not vectors.

Yes, sometimes called phasors with a magnitude and an angle. However, at a Z0-match point all phasors are either in phase or 180 degrees out of phase. Thus, ordinary arithmetic works just fine *at a Z0-match point*. Phasors with a zero degree angle get a plus sign and phasors with a 180 degree angle get a minus sign.
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3960. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:00:00 UTC
From: CAM <cam2338@bigfoot.com>
Message-ID: <39D5DBC1.A4D81389@bigfoot.com>
Source record: 178968

Nick Kennedy wrote:
> If we have a black box (voltage source and
> series impedance assumed), we can measure its impedance by loading it to a
> certain current draw and measuring the terminal voltage, then changing the
> current drawn and measuring the voltage again. This should allow a fairly
> easly calculation of the series impedance in that Thevenin box.

Unfortunately, multiplying that series impedance by the square of the
current through it often does not yield the true dissipation inside the
generator. Why not?
--
73, Cecil, W6RCA http://www.mindspring.com/~w6rca

3961. Re: new antenna help (using MFJ analyzer)

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:05:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <8r3akk$k59$1@neptunium.btinternet.com>
Source record: 178943

The effective depth of the ground can be taken as half the
skin depth of the soil under the antenna. It depends on soil
conductivity (or resistivity), permittivity and on
frequency.

Its not of great consequence. If you don't know the soil
conductivity in your back yard just run some of it through
your fingers and make a guess.

To find skin HF depth of the soil use program SOILSKIN.
Download from my website in a few seconds. Not zipped up.
One small file only. Run immediately.
--

Regards from Reg, G4FGQ
For free radio design software go to:
http://www.btinternet.com/~g4fgq.regp

Ed Hare, W1RFI <w1rfi@arrl.net> wrote in message
news:QE8B5.1839$ai4.349544@news.ntplx.net...
> <ehsjr@bellatlantic.net> wrote:
>
> > After that, if I end up close to 1:6 to 1 minimum swr,
I'll be satisfied.
> If
> > not, I don't know what to do next. Any ideas?
>
> What I would personally find very interesting is a plot of
the resistive
> part of the reactance vs height above ground. I would
like to compare the
> way it varies against the graph I posted at
> http://www.arrl.org/~ehare/temp/6mdip.jpg . That graph
assumes that the
> physical surface of the earth is the ground that is
modeled. I have often
> wondered just how far below the surface the "real" ground
is. :-) A simple
> measurement, but I lack the necessary test resources --
the round tuit. :-)
> If you get some results of R vs height, I can add them to
the graph and then
> we can REALLY have something to talk about. :-)
>

> IMHO, the measurement of the height above ground at which
the resistance is
> the highest would be a very good way to estimate the
actual depth of the
> ground.
>
> As an aside to the data, what is the present state of your
earth? Wet? Dry?
> Do you have an estimate of the characteristics of your
soil? Unfortunately,
> I didn't see a tremendous difference in R vs ground
characteristics. With
> "very good" ground, the R at 6.2 feet above ground was
90.23 ohms. With
> very poor ground, it was 82.29 ohms. Although I would
like to think that
> one could first determine the height of maximum R (in this
case, with VG
> ground, it was 6.2 feet) and then use the actual R value
to obtain an
> estimate of ground characteristics, I fear that 82 vs 90
ohms is not a
> tremendous swing and that the actual R value would vary a
bit from what
> EZNEC predicts due to other local variables. But if
someone IS over "very
> poor" ground (ie, dry desert?), and could do the
measurement, then improve
> the ground with moisture and salts, then do another
measurement, it sure
> would be interesting to see how close it comes to what
EZNEC predicts. The
> thing to watch out for, especially when the ground is
improved, is if the
> effective height of the antenna above ground varies as the
"ground" moves
> from the surface to lower depths.
>
> Roy or others, have you heard of or done any work on the
actual depth of
> ground relative to the surface of the earth? I am just
musing here, hoping
> to ferret out some explanation for the differences between
modeling and
> ehsjr's measurements.
>
> 73,
> Ed Hare, W1RFI
>
>

>

3962. ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:08:12 UTC
From: fractenna@aol.com
Message-ID: <20000929200812.07447.00000203@ng-fm1.aol.com>
Source record: 178944

To All Readers:

It has come to my attention that Roy Lewallen, W7EL, has posted an unauthorized copyrighted file on his

http://www.eznec.com

web site.

The file is of a fractal antenna, commonly dubbed 'MI2' . The copyright holder of this material is Fractal Antenna Systems, Inc., which has not been ask for , nor has granted, publication and distribution of this file by Mr. Lewallen.

The file was transcribed by Steven Best and thus is a derivative work of the aforementioned copyright material, in which the copyrighted material is at least substantially recognizable in Best's rendition.

It has been initially assumed that Mr. Lewallen was not aware of the copyright infringement, however in private correspondence he has chosen to deny that such copyright protection exists.

Mr. Lewallen is being formally sent a letter requesting that he cease and desist the further distribution of this copyright material and will have until December 15, 2000 to comply. Failure to do so will lead to suit against Roy Lewallen d/b/a Lewallen consulting/EZNEC.

Those who have downloaded this file are so advised that this is copyrighted material with an intended controlled distribution; it is not in the public domain; its web-based distribution does not constitute 'fair use'.

Copies of the file are available--under held copyright--by request, to those members of the fractal antenna reflector:

fractalantenna-subscribe@egroups.com

In a few weeks, it will also be available as a conditional(licensed)download from the web site

http://www.fractenna.com

Readers are advised not to break copyright law by downloading said file from the EZNEC web site.

Thank you for your help and understanding.

Sincerely,

Nathan Cohen, Ph.D.
CTO

Fractal Antenna Systems, Inc.

3963. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:13:41 UTC
From: fractenna@aol.com
Message-ID: <20000929201341.07215.00000219@ng-fm1.aol.com>
Source record: 178945

>Fractenna wrote:
>>
>> >My personal solution was to killfile Chip a long time ago. He was only the
>> >second person ever from this group to wind up in the killfile (the other
>was
>> >the equally childish Cecil Moore).
>>
>> Yo Cecil: Looks like we are kindred spirits:-)
>
>Gary killfiled me because he couldn't stand to hear IEEE
>definitions including the one for "Power Flow Vector". :-)
>--
>http://www.mindspring.com/~w6rca
>

The truth has set us free:-)

73
Chipster

3964. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:14:44 UTC
From: klocko@toad.net
Message-ID: <8r3b9fqrq1@nnrp1.deja.com>
Source record: 178947

In article <3a130a9c.625505479@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Fri, 29 Sep 2000 21:17:33 GMT, klocko@toad.net wrote:
>
> >In article <39D4A748.E290D543@bigfoot.com>,
> > CAM <cam2338@bigfoot.com> wrote:
> >> VE9SRB wrote:
> >> > 100 watts + 100 watts does not "add" to become 200 watts.
> >>
> >> Since power is a scalar, of course it does. Power is a scalar
> >> measured at a point past which energy flows.
> >>
> >> Nope, you forgot current. If the voltages are in phase, the
currents
> >will
> >> be out of phase, keeping the 100+100=200 math consistentent. At a
> >Z0-match,
> >> the ratio of V/I must change because the Z0 of the transmission
line
> >> changes. Thus, when transistioning from Z0=50 to Z0=300, the
voltage
> >will
> >> indeed increase but an exactly corresponding decrease in current
will
> >occur
> >> which keeps energy conserved. Remember, reflected power has the
> >voltage and
> >> current 180 degrees OUT of phase. If the voltages add, the currents
> >will
> >> subtract (and vice versa).
> >
> >Hi there Cecil,
> >There are 2 voltage waves and 2 current waves at the point of
interest.
> >Let's say that the phases are all identical to keep things simple. If
> >the voltage waves combine and the current waves combine, does
> >(E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?
> >73, Bill N3WK
> >
> >
> >Sent via Deja.com http://www.deja.com/
> >Before you buy.
>
> Hi Bill,

>
> Forgotten binomial high school math? The FOIL method?
> >(E1+E2)*(I1+I2)
> if properly stated should resolve to
> E1 * I1 + E1 * I2 + E2 * I1 + E2 * I2
>
> FOIL:
> First two
> Outer two
> Inner two
> Last two
>
Hi Richard,
Never could have forgotten the FOIL method, 'cause I never heard it described that way. Good Mnemonic though. My teachers just drew lines to join the various pairs. Must be an east-coast thing. So, in general, the answer to my question is NO. 73's
Bill N3WK

Sent via Deja.com http://www.deja.com/
Before you buy.

3965. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:15:01 UTC
From: fractenna@aol.com
Message-ID: <20000929201501.07215.00000220@ng-fm1.aol.com>
Source record: 178946

>Fractenna wrote:
>>
>> >My personal solution was to killfile Chip a long time ago. He was only the
>> >second person ever from this group to wind up in the killfile (the other
>was
>> >the equally childish Cecil Moore).
>>
>> Yo Cecil: Looks like we are kindred spirits:-)
>
>Gary killfiled me because he couldn't stand to hear IEEE
>definitions including the one for "Power Flow Vector". :-)
>--
>http://www.mindspring.com/~w6rca
>
>

Hey Cec--

What kind a person calls a nice ol' Texas gentleman like you 'childish'? I
mean, let's get real:-)

Rained there (I hope)?

73
Chip

3966. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:24:49 UTC
From: rwclark@seanet.com
Message-ID: <39d72c7f.7275070@news.seanet.com>
Source record: 178948

On Fri, 29 Sep 2000 20:28:51 GMT, "Wayne Jones" <wrjones1@home.com>
wrote:

>Well, thanks to this newsgroup, I have been able to settle on the best
>antenna for my 20m cw qrp operation.
>
>I plan to put up a 30 foot mast made of fence top rail. The mast will extend
>about 14 feet above the edge of my 2 story house.
>With the antenna attached to the ends of the roof I get an inverted V with
>legs of 21 feet and an angle of 90 degrees.
>With the active part of the leg at about 16 feet on each side, the remaining
>wire will elevate the antenna about 3 feet above the rain gutter that runs
>along the edge of the roof under the antenna and should keep the ends out of
>the snow in winter. I will use a plastic plumbing pipe T to insulate the top
>of the metal mast from the antenna wire.
>
> I understand that with an inverted v, the legs have to be slightly longer
>than a horizontal dipole. Is it possible to come up with a good guess as to
>what the length should be?
>
>Also, will the impedance be around 50 ohms at the center? I understand that
>the impedance varies with the angle of the V.
>
>Tnx
>Wayne Jones
>ve3gqx
>

Hi Wayne,

The height and apex angle you plan on are very nearly the same as my
Inverted V fractal design found at:
http://www.seanet.com/~rwclark/fractal/InVfracV/index.htm

This is not a 20M antenna though, but is tunable. The SWR chart that
is presented for this band (and all the others not in the 10M band) is
(are) due to the inclusion of either an inductor or capacitor at the
feedpoint, so don't let that mislead you into thinking it already
matches to 50 Ohms.

I don't have a comparison design to demonstrate how much you stand to
gain (or lose), and if it seems too complex - fractals being what they
are - you may opt to pass this by. It is "experimental."

The rationale (which "should" be supportable through modeling) is that
by drawing up the ends of the V, you should not suffer as much loss as

for the ordinary V that you might otherwise construct. I will admit this is a boon in name only, because at these scales there is very little you can do to boost gain, and most effort is trying to escape the death grip of ground.

Another fractal antenna, tuned to 20M, is found in either the k2 or the Flying H located at:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
These two illustrate how by pouring your power into ground, you can improve your gain at one angle, 10 degrees. This is an optimization available to low, low antennas only (thank your stars you aren't painted into this corner - some folks are) as compared to equally crippled designs. As the two designs differ by only 0.5 dB, you may wish to consider the Flying H as being vastly simpler to construct. I will warn you however that these ground huggers exhibit wild variations in SWR with small changes in elevation (a 3 inch change in elevation is enough to peg your SWR meter). It makes no sense to operate these any further from earth, or any closer - there are too many better options. And improving the ground condition only makes operation worse. Oh well, we could classify these as extremely experimental (painful).

73's
Richard Clark, KB7QHC

3967. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:31:37 UTC
From: rwclark@seanet.com
Message-ID: <39d83321.8973523@news.seanet.com>
Source record: 178949

On Fri, 29 Sep 2000 19:08:25 -0500, CAM <cam2338@bigfoot.com> wrote:

>Richard Clark wrote:
>> Look up heat in your dictionary, does it qualify as radiation? Or do
>> they have two part definitions for that too?
>
>Nope, no definition for "heat".

Hi Cecil,

Ha! So much for the first definition then. They could have been
thinking of sugar plum fairies when they wrote about dissipation:
"dissipation - loss of electric energy as elfin creatures frolicking
in the valley."

Pretty poor dictionary, doesn't even understand english.

73's
Richard Clark, KB7QHC

3968. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:35:10 UTC
From: rwclark@seanet.com
Message-ID: <39d93492.9342443@news.seanet.com>
Source record: 178951

On Sat, 30 Sep 2000 00:14:44 GMT, klocko@toad.net wrote:

>In article <3a130a9c.625505479@news.seanet.com>,
> rwclark@seanet.com (Richard Clark) wrote:
>> On Fri, 29 Sep 2000 21:17:33 GMT, klocko@toad.net wrote:
>>
>> >In article <39D4A748.E290D543@bigfoot.com>,
>> > CAM <cam2338@bigfoot.com> wrote:
>> >> VE9SRB wrote:
>> >> > 100 watts + 100 watts does not "add" to become 200 watts.
>> >>
>> >> Since power is a scalar, of course it does. Power is a scalar
>> >> measured at a point past which energy flows.
>> >>
>> >> Nope, you forgot current. If the voltages are in phase, the
>currents
>> >will
>> >> be out of phase, keeping the 100+100=200 math consistentent. At a
>> >Z0-match,
>> >> the ratio of V/I must change because the Z0 of the transmission
>line
>> >> changes. Thus, when transistioning from Z0=50 to Z0=300, the
>voltage
>> >will
>> >> indeed increase but an exactly corresponding decrease in current
>will
>> >occur
>> >> which keeps energy conserved. Remember, reflected power has the
>> >voltage and
>> >> current 180 degrees OUT of phase. If the voltages add, the currents
>> >will
>> >> subtract (and vice versa).
>> >
>> >Hi there Cecil,
>> >There are 2 voltage waves and 2 current waves at the point of
>interest.
>> >Let's say that the phases are all identical to keep things simple. If
>> >the voltage waves combine and the current waves combine, does
>> >(E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?
>> >73, Bill N3WK
>> >
>> >
>> >Sent via Deja.com http://www.deja.com/
>> >Before you buy.

>>
>> Hi Bill,
>>
>> Forgotten binomial high school math? The FOIL method?
>> >(E1+E2)*(I1+I2)
>> if properly stated should resolve to
>> E1 * I1 + E1 * I2 + E2 * I1 + E2 * I2
>>
>> FOIL:
>> First two
>> Outer two
>> Inner two
>> Last two
>>
>Hi Richard,
>Never could have forgotten the FOIL method, 'cause I never heard it
>described that way. Good Mnemonic though. My teachers just drew lines to
>join the various pairs. Must be an east-coast thing. So, in general, the
>answer to my question is NO. 73's
>Bill N3WK
>
>
>Sent via Deja.com http://www.deja.com/
>Before you buy.

Hi Bill,

As an electronics instructor in the Navy, I had to keep up with any
number of teaching and learning aids. I know several for the resistor
color code that I won't repeat here. I could in front of 30 sailors
and none would blush, plus it kept them from falling asleep (or
tossing me overboard).

73's
Richard Clark, KB7QHC

3969. Re: Final Post

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:35:22 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <ezaB5.1843$QF1.254534@paloalto-snr1.gtei.net>
Source record: 178950

"Gary Coffman" <ke4zv@bellsouth.net> wrote in message

> My personal solution was to killfile Chip a long time ago. He was only the
> second person ever from this group to wind up in the killfile (the other
was
> the equally childish Cecil Moore). But that wasn't sufficient since some
> posters insist on following up on his trolls. Their responses were so
> congesting the group that I could no longer spend the time to follow it.
> So now I'm reluctantly killfiling those who persist in posting follow ups
> to his trolls. That is beginning to whittle down the volume of the group
> so that I can follow it again.
>
> I'd suggest that anyone who really wants to deal with this problem should
> do the same. Killfile Chip and all who respond to his trolls, particularly
those
> who respond with canned statements or insults. If people begin to realize
that
> by responding to Chip they wind up in the killfiles of many of the readers
of the
> group, they may stop responding to him. Those who persist in responding,
we
> probably don't want to read anyway because they will have shown themselves
> to be too boorish to be worth the time to read.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

Bravo - that's exactly what I did a long time ago. It certainly cleans up a
lot of the mess. I also found the kill file handy for those who post E-Bay
FA stuff as FS, along with posters selling CB stuff, dealer spam, etc.

73 de W6DKN

3970. Re: QEX Letters

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 00:54:41 UTC
From: klocko@toad.net
Message-ID: <8r3dkg$si8$1@nnrp1.deja.com>
Source record: 178952

In article <39D52767.989CC6B3@bigfoot.com>,
CAM <cam2338@bigfoot.com> wrote:
> klocko@toad.net wrote:
> > There are 2 voltage waves and 2 current waves at the point of
interest.
> > Let's say that the phases are all identical to keep things simple.
If
> > the voltage waves combine and the current waves combine, does
> > (E1+E2)*(I1+I2) equal E1*I1 + E2*I2 ?
>
> Actually, there are three voltage and current waves forming an
> interference pattern at a Z0-match. Neglecting losses, there's
> the voltage/current generated waves, the voltage/current reflected
> waves, and the voltage/current forward waves. At a Z0-match point,
> everything is either in phase or 180 degrees out of phase. At a
> 50 ohm coax to 300 ohm twinlead junction, we know the ratio Vg/Ig
> equals 50 ohms, the ratio V-/I- equals 300 ohms, and the ratio V+/I+
> equals 300 ohms. If we assume Pg to be 100 watts and that there is
> an SWR of 5.83:1 on the 300 ohm line, then P- equals 100 watts and
> P+ equals 200 watts. This gives us all we need to know. Given a
> reference of Vg = 71v@zero, Ig = 1.4a@zero, V+ = 245v@zero,
> I+ = 0.82a@zero, it's obvious that V- = 173v@180 deg and
> I- = 0.58a@zero. The voltage just to the left and right of the
> Z0-match is 71v@zero = 245v@zero + 173v@180 and the current just
> to the left and right of the Z0-match is
> 1.4a@zero = 0.82a@zero + 0.58a@zero
>
> These values are all rounded so the equations are not exact
> equalities. All phasors are at zero degrees except V- which,
> as predicted by theory, is 180 degrees out of phase with I-
> --

If I have time I'll go thru your numbers, but the original question was
does 100 watts + 100 watts equal 200 watts. If there are two sets of
waves (take the 2 backward traveling and the 2 forward traveling),
you're equating (E1+E2)*(I1+I2) to E1*I1 + E2*I2. Voltages combine
vectorially, currents combine vectorially, but powers (which are dot
products of voltage and current) don't combine.
Bill N3WK

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3971. Re: VHF/UHF Ham/Business Band?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 01:19:30 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <39D53F54.5F2B5986@att.net>
Source record: 178953

Rick, take a look in the latest Radio Shack catalog at their industrial radios. They are pushing a line that have coverages starting at 146 MHz and 450 Mhz or so. Not one word in the text re amateur radio bands, but they do stress that an FCC business radio license is required.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

Rick Littlefield wrote:
>
> A 1/4 wave mobile whip (or fixed ground plane) cut for--say 150 or 151 MHz will
> cover both the 2 meter and business bands with less than 2:1 VSWR. Once you
> get into 5/8 wave or half-waves in phase, forget it. They are too narrow.
>
> Rick K1BQT

3972. Re: Troll alert Chip has the run again after the chili contest.Piss off this NG you bastard. I am fed of your trolls. You behave like a pre-WW2 bolchevick.

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 01:20:31 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <8r3f4v$e3a$0@208.207.71.142>
Source record: 178954

Gilbert Mouget wrote:

> 30 Sep 2000 00:08:12 GMT dans l'article
> <20000929200812.07447.00000203@ng-fm1.aol.com>
> l'honorable Fractenna <fractenna@aol.com> escrivit :
>
> :Nathan Cohen, Ph.D.
> :CTO
> :Fractal Antenna Systems, Inc.
>
> Congressmen are taking care of your grant.
>
> Take care of your pants.

He doesn't have any.....He's the emperor.

3973. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 01:37:06 UTC
From: Pissed off Ham <NoWay@Hoser.net>
Message-ID: <jrgatscprinr0p6sno48vso84ti26l5qks@4ax.com>
Source record: 178955

On Fri, 29 Sep 2000 18:00:41 -0500, Bill Aycock <baycock@hiwaay.net>
wrote:
>> under:
>> http://www.sbirsttr.com/Awards/SrchResultsDtlsForm.asp?RanNo=8
check the link again, its gone

3974. Wanted : Kenwood TH-315 User Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 02:01:24 UTC
From: Dan K Nelson <w6dkn@qsl.net>
Message-ID: <UPbB5.1988$rQ6.327079@dfiatx1-snr1.gtei.net>
Source record: 178956
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap

Greetings,

I have recently acquired a Kenwood Th-315 220 HT, and am in need of an Owners manual (or photocopy of one). I am willing to pay a fair price for either.

Thanks,

Dan K Nelson - W6DKN

3975. Re: WARNING: MORE SPAM BY N1IR the troll

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 03:52:46 UTC
From: "ab2etXXXmy-deja.com" <ab2et@my-deja.com>
Message-ID: <8r3o2d$3t9$1@nnrp1.deja.com>
Source record: 178957

Hi Rick,
I do it all the time, it is fun working 20-10 meters right from the beach getting the top hat stabilized was a bear at first especially with a good wind blowing from the east on the south shore of Long Island.

I wonder how one can claim something publicly when they refuse to publish their so called version and then claim some form of infringements I wonder if his version meets the 27.564 m and an aperture size of 2.8 m (X) by 2.662 m (Y), I guess that it must be something really funny hiding under that kimono?
This behavior is truly bizarre even from that bunch of looping characters.

--
73's Steve
oo
(__)
AB2ET
"I bet Two Extra "Terrestrials"
Aperture Engine is that a
singularity detector? What!

In article <20000929111344.19692.00000127@ng-cu1.aol.com>,
k1bqt@aol.com (Rick Littlefield) wrote:
> Anyone who's operated 20-meter mobile using a center-loaded whip with a big cap
> hat on top can claim prior art. Hint: Next time, park next to the ocean.
>
> Rick K1BQT
>

Sent via Deja.com http://www.deja.com/
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3976. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 05:08:39 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r3sfvnim1@bob.news.rcn.net>
Source record: 178958

Looks like the frackster got beat out by a better company...
one with real employees...

3977. Re: Grant to Chip

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 05:25:40 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8r3tfr$7f$1@bob.news.rcn.net>
Source record: 178959

and one that is articulate as well...
NO obfuscation....

3978. Re: Copyright problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 06:55:40 UTC
From: k3bu@aol.com
Message-ID: <20000930025540.29527.00000349@ng-fe1.aol.com>
Source record: 178960

>
>Interesting... I took my morning dump and when
>I looked in the bowl, there was a fractal shape !!!
>Is chip going to sue the shit out of me too?
>

Did you copyright it?

Next thing Chirp will claim copyright and (incoherent) patent infrigment on
snowflakes. (allmighty made them look like "his" freaktals).
Grow up chirping loser!

bada BUm

3979. Re: ADVISORY: COPYRIGHT INFRINGEMENT ON EZNEC WEB SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 20:08:46 UTC
From: william ewald <wgewald@att.net>
Message-ID: <ajnbtsoog96gp9varl7du8tklmaa14kcrn@4ax.com>
Source record: 178797

On 29 Sep 2000 22:17:03 -0500, jeffreys@cyburban.com (Jeffrey Steinberg) wrote:

>How about just creating rec.radio.amateur.antenna.fractal
>for those who want to discuss this topic and leave rec.radio.amateur.antenna
>for "conventional" antennas?

That's a good idea. I'd like to learn something about fractal UHF antennas. There's a "serpentine" decal antenna on the market for 440 Mhz, and I'd like to find out if there is any performance difference with a "fractal" one.

3980. Antenna publishing

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 20:08:48 UTC
From: william ewald <wgewald@att.net>
Message-ID: <kunbtssoonik4fj1ibcq0341c10l89c605@4ax.com>
Source record: 178798

On 29 Sep 2000 17:55:54 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

> Many in the
>industry believe Reflections was taken off the publication list because of the
>latter -- "reflecting" one of the risks ham radio faces when one publisher
>enjoys a near-monopoly in the dissemination of technical information.

If you were to make a list of antenna books for amateur radio, would
ARRL publish more than 90%, I wonder?

3981. Re: Inverted V

Newsgroup: rec.radio.amateur.antenna
Date: 2000-09-30 20:10:42 UTC
From: william ewald <wgewald@att.net>
Message-ID: <15ictsccvv18v05l85t2e6h4uqafjm96q4@4ax.com>
Source record: 178799

On Sat, 30 Sep 2000 14:36:27 GMT, Brian Kelly <kelly@dvol.com> wrote:

>
>
>Wayne Jones wrote:
>
>>
>> I understand that with an inverted v, the legs have to be slightly longer
>> than a horizontal dipole. Is it possible to come up with a good guess as to
>> what the length should be?
>>
>> Also, will the impedance be around 50 ohms at the center? I understand that
>> the impedance varies with the angle of the V.
>>
>> Tnx
>> Wayne Jones
>> ve3gqx
>
>>
>The only parameters which really matter are height and the vee angle. You'd be
>better off if the angle was 120 degrees or more than with 90 degrees.

There is an article at the Radio Works site saying it should be
>140 degrees.